Online Appendices

(Not for publication)

A Model Derivations

A.1 Derivation of Equation 3

To derive equation (3), start with the total derivative of $M_{ss} = M_s P_s(s)$, holding M_s constant.

$$dM_{ss} = M_s \left[\frac{\partial P_s(s)}{\partial v_s} dv_s + \sum_{d \neq s} \frac{\partial P_s(s)}{\partial v_d} dv_d \right] \tag{9}$$

Then, evaluate the partial derivatives of the choice probabilities in (2).

$$\begin{aligned} \frac{\partial P_s(s)}{\partial v_s} &= \frac{\alpha \exp(\alpha v_s + n_{ss})}{\sum_{d'} \exp(\alpha v_{d'} + n_{sd'})} - \alpha \left(\frac{\exp(\alpha v_s + n_{ss})}{\sum_{d'} \exp(\alpha v_{d'} + n_{sd'})} \right)^2 \\ &= \alpha P_s(s)(1 - P_s(s)) \end{aligned} \tag{10}$$

$$\begin{aligned} \frac{\partial P_s(s)}{\partial v_d} &= -\alpha \frac{\exp(\alpha v_s + n_{ss}) \exp(\alpha v_d + n_{sd})}{\left(\sum_{d'} \exp(\alpha v_{d'} + n_{sd'})\right)^2} \quad \text{where } d \neq s \\ &= -\alpha P_s(s) P_s(d) \end{aligned} \tag{11}$$

Plugging these into (10) and simplifying yields (3).

A.2 Derivation of Equation 6

To derive equation (6), start with its left hand side, and impose the assumptions listed just above (6). Under assumption i), the employment probability facing Mexican workers is the Mexican employment to population ratio, so

$$Pr(emp_d) = \frac{Emp_d^M}{M_d} = \frac{\sum_i Emp_{id}^M}{M_d}, \tag{12}$$

where Emp_{id}^M is Mexican employment in industry i in destination d and M_d is the Mexican-born population of d. Take the derivative of $w_d Pr(emp_d)$, holding wages fixed under the rigid wage assumption.

$$w_d dPr(emp_d) = w_d \frac{\sum_i dEmp_{id}^M}{M_d} = \sum_i w_d \frac{Emp_d^M}{M_d} \frac{Emp_{id}^M}{Emp_d^M} \frac{dEmp_{id}^M}{Emp_{id}^M} = \sum_i w_d \gamma_d \frac{Emp_{id}^M}{Emp_d^M} \frac{dEmp_{id}^M}{Emp_{id}^M}, \tag{13}$$

where $\gamma_d \equiv Emp_d^M / M_d$ is the employment probability among Mexican-born workers in d. Note that $w_d \gamma_d$ is the expected earnings among Mexicans in d. Assumption iii) implies that job losses in a given industry and location are allocated proportionately to Mexican-born and other workers, so

$$\frac{dEmp_{id}^M}{Emp_{id}^M} = \frac{dEmp_{id}}{Emp_{id}}. \tag{14}$$

Assumption ii) implies equal baseline expected earnings across destinations, so

$$w_d \gamma_d \equiv \delta. \tag{15}$$

Plugging the preceding two expressions into (13) yields the right hand side of (6).

A.3 Alternative Interpretation of Shock Magnitude

As mentioned in Section 3.2, the US employment shock measure in (6) can be interpreted as the wage times the number of US jobs lost per migrant under the assumption that the wage is constant across US locations, i.e. $w_d = w,\ \forall d$, which in turn implies that $\gamma_d = \gamma,\ \forall d$ and $\delta = w\gamma$. Given this assumption, start with the right side of (6) and use the definition of γ from above, the migration network term $\varphi_{sd} = M_{sd}/(\sum_{d' \neq s} M_{sd'})$, and the the identity

$$\frac{d\ Emp_d^M}{Emp_d^M} \equiv \sum_i \frac{Emp_{id}^M}{Emp_d^M} \frac{d\ Emp_{id}^M}{Emp_{id}^M}. \tag{16}$$

Plug these in and simplify to yield

$$\begin{aligned} w\gamma \sum_{d \neq s} \varphi_{sd} \sum_i \frac{Emp_{id}^M}{Emp_d^M} \cdot \frac{d\ Emp_{id}}{Emp_{id}} &= w \sum_{d \neq s} \frac{Emp_d^M}{M_d} \frac{M_{sd}}{(\sum_{d' \neq s} M_{sd'})} \frac{d\ Emp_d^M}{Emp_d^M} \\ &= w \frac{1}{\sum_{d' \neq s} M_{sd'}} \sum_{d \neq s} \frac{M_{sd}}{M_d} d\ Emp_d^M. \end{aligned} \tag{17}$$

Since $\sum_{d' \neq s} M_{sd'}$ is the total number of US migrants from s, the right side of (17) is the wage times the number of jobs lost (or gained) per migrant from s. This derivation thus shows that, under the appropriate assumptions, the US employment shock facing each Mexican municipio has an intuitive reduced-form interpretation as the wage times the number of US jobs lost per migrant.

B Data

B.1 Matrículas Consulares de Alta Seguridad

We use a custom extract from the MCAS administrative dataset covering all the *matrículas consulares* issued in 2006 to Mexican-born individuals by place of birth in Mexico and place of residency in the US. Because this extract did not contain numerical identifiers for municipio or county, we needed to determine which municipio each record represented. We assigned each source municipio name an identifier to match those used by Mexico's Statistical Office (INEGI) and we assigned each US count a county-level FIPS code.

Mexican place of birth: The extract contained Mexican state and municipio of birth. However, the field for municipio of birth was sometimes reported by cardholders as their town or place of birth. After merging municipio names from INEGI's list, we ended up with 87 percent of the matrículas perfectly matched. For the remaining 13 percent of the matrículas, more than half (7 percent of the total) were from individuals reporting Mexico City as their place of birth. To address this issue, we aggregated *municipios* within Mexico City (Distrito Federal) in all Mexican datasets. For the remaining 6 percent we matched the information recorded in the municipio field to INEGI's identifiers by using a record linkage method (reclink2) in Stata, performing fuzzy matches. With these two procedures we were able to identify 95 percent of *municipios* in the dataset. Finally, we manually assigned places to *municipios* for 3 percent of the unmatched matrículas in the data, leaving us with 98 percent of the matrículas matched to a *municipio*.

US county of residency: The extract contained US state and county of residency. However, in some instances cardholders reported places or cities of residency, abbreviated or misspelled city names (i.e. LA for Los Angeles), or in very few instances county of residency that did not corresponded to the reported state of residence (i.e Charleston, South Dakota instead of Charleston, South Carolina). After merging county names using the FIP codes list from the US Census Bureau, we ended up with 88 percent of the matrículas perfectly matched. For the remaining unmatched cases, including those just mentioned, we manually coded the correct counties.

We aggregate destination counties to the commuting zone level, using the crosswalk in Dorn (2009).[43] This provides us with information on the connections between each Mexican municipio and each US commuting zone.

B.2 US Employment

We measure changes in US labor demand using payroll employment from the County Business Patterns (CBP) data from 2006-2010. This dataset includes the universe of employment at business establishments in covered industries in each US county and is thus the most accurate data source for measuring local employment declines in the private sector. Unfortunately, the CBP data does not include any demographic information and we therefore cannot use it to directly calculate job losses among Mexican-born workers. We therefore combine the CBP data with data from the 2006 American Community Survey (ACS) from IPUMS (Ruggles, Flood, Goeken, Grover, Meyer, Pacas and Sobek 2017). The ACS data allow us to fill in employment changes for industries not covered by the CBP (including government and agriculture) and to measure the CZ-specific share of Mexican-born individuals working in each industry. We observe 20 separately identifiable industries at the

[43] `https://www.ddorn.net/data.htm` (file E7)

CZ level. Because our goal is to measure labor demand changes specific to Mexican-born workers employed in US industries, we also use data from the 2006 American Community Survey (ACS) to measure the share of the Mexican-born migrants employed in each industry prior to the Great Recession.

Because we want to measure changes in US labor demand at the local labor market level, we use commuting zones as our geographic unit of analysis in the US. We aggregate county-level employment information from CBP and migrant destination data from MCAS to the commuting zone level using the crosswalk in Dorn (2009).[44] We make manual adjustments to maintain consistent county boundaries over time. Because the most disaggregated sample available in the ACS is the Public Use Micro Areas (PUMA), we use another crosswalk from Dorn (2009) to match PUMAS to commuting zones.[45] After these aggregations at the commuting zone level, we were able to use these two datasets to construct a weighted average of employment changes accounting for the industrial composition of Mexican employment in each US labor market.

B.3 Demographic and Population Outcomes

Return Migration: We define return migrants from the US to each Mexican municipio between 2005-2010 as individuals ages 15-64 living in Mexico during the 2010 Census reference period but who lived in the US five years before. These flows are identified through a question that asks respondents their country of residency five years prior to the Census year. Note that the count of return migrants does not include any individuals who were living in Mexico five years previously but who moved to the US and back within the five year window. We also calculate pre-shock return migration for the working age population between 2000-2005 using information from the the 2005 *Conteo* and the 2000 Mexican Census. To calculate these measures, we use official tabulations of the full-count 2010 Mexican Census and the 2005 Inter-Censal Count (*Conteo*), available at INEGI's website. We divided the 2005-2010 measure by the 2005 working age population and the 2000-2005 measure by the 2000 working age population in each municipio, using official tabulations of the full-count 2000 Mexican Census and 2005 *Conteo*, available at INEGI's website.

Emigration: We calculate emigration from each Mexican municipio to the US as the number of individuals ages 15-64 who reported leaving between 2005-2010 in the 2010 Mexican Census, using the 2010 Mexican Census supplemental sample questionnaire. This survey, available at the Mexican Statistical Office website (INEGI) contains an international migration module, conducted on a 10% sample of Mexican households in each Census year, asking respondents if anyone in the household went to live in the US during the previous five years. We also calculate pre-shock emigration for the working age population who reported leaving to the US between 1995-2000 using microdata from the 2000 Mexican Census, as the 2005 *Conteo* does not include information on emigration. We divided the 2005-2010 measure by the 2005 working age population and the 1995-2000 measure by the 2000 working age population in each municipio, using official tabulations of the full-count 2000 Mexican Census and 2005 *Conteo*, available at INEGI's website. Note that because the Mexican Census does not provide information on emigration of entire households, our emigration measure may be underestimated. Since we construct the emigration measure using a sample rather than the population, the return migration estimate is likely more reliable.

[44] `https://www.ddorn.net/data.htm` (file E7)

[45] `https://www.ddorn.net/data.htm` (file E5).

Population Changes: This measure is defined as the proportional change in the total number of Mexican individuals ages 15-64 in each Mexican municipio between 2005-2010 and between 2000-2005. We use official tabulations of the full-count 2000 and 2010 Mexican Census and the 2005 *Conteo*, available at INEGI's website.

Sex Ratio: This measure is defined as the ratio of the total number of Mexican women ages 15-64 in each Mexican municipio at the time of the Census or *Conteo* to the total number of men ages 15-64 in each Mexican municipio at the same time. We calculate the female to male sex ratio using official tabulations of the full-count 2000 and 2010 Mexican Census and the 2005 *Conteo*, available at INEGI's website.

Educational Attainment: We measure the share of the municipio population with each education level as the total number of individuals ages 15-64 with that level of education at the time of the Census or *Conteo*, divided by the total working age population of the same municipio. The "less than primary education" category includes those with no schooling and with up to 4 years of primary education; individuals with primary education are those with primary and lower secondary completed; those with upper secondary completed are considered to have a secondary education; individuals with university education are those with at least some post-secondary schooling. We use official tabulations of the full-count 2000 and 2010 Mexican Census and the 2005 *Conteo*, available at INEGI's website.

Households receiving Remittances: We measure the share of households receiving remittances as the proportion of households in each municipio and Census year reporting receiving income from relatives abroad. We use 2000 and 2010 Mexican Census microdata from (Ruggles et al. 2017) to calculate this measure. Note that although the 2000 Census includes a question on the amount of remittances received by each surveyed household in Mexico, the 2010 Census reports only whether the household received any remittances. The relevant question is somewhat open-ended regarding the timeframe of remittance receipt, and enumerators encouraged respondents to report both regular and sporadic remittance receipt.

B.4 Economic Outcomes

Employment-to-population ratio: We calculate the employment-to-population ratio for each municipio as the share of the population ages 15-64 with formal employment. We measure the number of employed people in each municipio, separately for women and men, using full-count tabulations, available at INEGI's website, from the 1999, 2004, and 2009 Mexican Economic Census, which covers formal employment in Mexico excluding agriculture, livestock, forestry, mass transit, taxis, farmers' insurance funds, political organizations, and domestic employees. We divide this employment count by the working age population of the corresponding municipio using official tabulations of the full-count 2000 and 2010 Mexican Census and the 2005 *Conteo* available at INEGI's website.

Earnings per hour: We measure earnings per hour as the municipio's aggregate yearly earnings divided by the municipio's aggregate yearly hours worked, using full-count tabulations from the 1999, 2004, and 2009 Mexican Economic Census. This earnings measure therefore covers the same sectors as the employment measure. Note that earnings and hours worked are not available separately for men and women.

Appliance Ownership: We calculate appliance ownership as the proportion of households in each municipio reporting owning the relevant appliance at the time of the Census or *Conteo*, including a personal computer, a refrigerator, a washing machine, or a television. We use official tabulations of

the full-count 2000 and 2010 Mexican Census and the 2005 *Conteo*, available at INEGI's website.

School Attendance Rate: We calculate the school attendance rates as the total number of children in each municipio attending primary (ages 6-12), lower secondary (ages 13-15) or upper secondary (ages 16-18) education at the time of the Census or *Conteo*, divided by the total population in that same age group and municipio. We use official tabulations of the full-count 2000 and 2010 Mexican Census and the 2005 *Conteo*, available at INEGI's website.

B.5 Controls

Immigration policies: We use indicators for newly introduced state-level anti-immigrant employment legislation and indicators for new 287(g) agreements allowing local officials to enforce federal immigration law, using information from the database complied by Bohn and Santillano (2017). Because these variables are measured at the state level, we use the crosswalk in (Dorn 2009) to map states to commuting zones.[46] The control variables we include in the regressions are weighted averages of changes in the policy indicators with weights based on the destination distribution of migrants from the relevant municipio.

Trade Shocks: We focus on the effects of declining US employment opportunities facing potential migrants from Mexico, but the Great Recession also reduced trade between Mexico and the US Because we focus on migration-related channels, the effects of declining trade could confound our analysis. We control for such trade effects by constructing municipio-level exposure to change in Mexican trade with the US We begin by constructing industry-level changes in trade from Mexico to the US per Mexican worker. We use trade data from the US Census Bureau, provided in Stata format by Peter Schott.[47] We aggregate these data from 10-digit HS products to 4-digit NAICS industries using the concordance from Pierce and Schott (2012) and calculate the change in trade value from the period 2001-2005 to the period 2006-2010. We measure initial Mexican employment using data from the 2004 Mexican Economic Census, which covers the vast majority of firms in sectors outside agriculture.[48] For each municipio, we then generate a weighted average of these industry-level trade changes, where the weights reflect the municipio's 2004 distribution of tradable-industry employment across 4-digit NAICS industries, also calculated using the Economic Census. The weights sum to one across tradable industries, and we include an additional control for the nontradable share of employment in 2004 to address the incomplete shares problem (Borusyak et al. 2022).

Homicide Rate: We measure the number of homicides during 2005-2010 for each municipio divided by the 2005 population for the corresponding municipio, by using administrative yearly records from the Mexican Statistical Office (INEGI) and official tabulations of the full-count 2005 *Conteo* available at INEGI's website.

[46] `https://www.ddorn.net/data.htm` (file E8)

[47] `https://sompks4.github.io/sub_data.html`

[48] `https://www.inegi.org.mx/app/saic/` Accessed March 27, 2020.

B.6 Summary Statistics

Descriptive statistics for the shock measure and for control variables appear in Panel A of Appendix Table B1. Panel B displays summary statistics for outcome variables. Note that the statistics listed in Panel B are calculated using the outcome variables prior to dividing by exposure.

Table B1: Summary Statistics

	Obs	Mean	Std. Dev.	p10	p90
Panel A: Shock Measure and Control Variables					
Exposure	866	0.259	0.138	0.096	0.453
US Employment Shock	866	-0.108	0.034	-0.139	-0.064
New 287g Policy	866	0.133	0.128	0.032	0.254
Employment Policy	866	0.174	0.137	0.047	0.360
Trade Shock ($1000s)	866	-8.479	70.479	-13.747	4.706
Non-tradable share of Employment	866	0.722	0.175	0.467	0.902
△ Homicide Rate (per 1000)	866	0.891	1.329	0.055	2.174
Panel B: Outcome Variables					
Population growth and Migration - Mexican Population Census					
Population Growth 2005-10	866	0.138	0.079	0.065	0.218
Return Migration 2005-10/Pop2005	866	0.028	0.017	0.008	0.051
Emigration 2005-10/Pop2005	866	0.024	0.021	0.006	0.047
Other Channels - Mexican Population Census					
△ Sex Ratio (F/M) 2005-10	866	-0.046	0.040	-0.098	-0.002
△ Less than primary education 2005-10	866	-0.053	0.020	-0.079	-0.025
△ Primary education 2005-10	866	0.004	0.040	-0.049	0.051
△ Secondary education 2005-10	866	0.035	0.014	0.020	0.052
△ University education 2005-10	866	0.020	0.012	0.006	0.036
Households with Remittances 2010	866	0.040	0.036	0.008	0.093
Economic Outcomes - Mexican Economic Census					
△ Log Earnings per Hour 2004-09	864	0.230	0.477	-0.243	0.659
△ Epop 2004-09	866	0.018	0.049	-0.012	0.058
△ Epop Men 2004-09	866	0.014	0.054	-0.030	0.061
△ Epop Women 2004-09	866	0.021	0.054	-0.003	0.060
Economic Outcomes - Mexican Population Census					
△ Computer Ownership 2005-10	866	0.066	0.034	0.026	0.113
△ Washing Machine Ownership 2005-10	866	0.068	0.043	0.012	0.123
△ Refrigerator Ownership 2005-10	866	0.064	0.045	0.008	0.127
△ TV Ownership 2005-10	866	0.027	0.039	-0.003	0.077
△ Attendance Rate (ages 6-12) 2005-10	866	0.005	0.011	-0.007	0.018
△ Attendance Rate (ages 13-15) 2005-10	866	0.050	0.040	0.003	0.106
△ Attendance Rate (ages 16-18) 2005-10	866	0.055	0.037	0.008	0.102

This table shows summary statistics for all municipio-level outcomes, the main independent variable, and control variables used in the analyses. To construct dependent variables used in the regressions, we divide the listed variables by exposure. The table presents outcome values prior to dividing by exposure.

C Additional empirical results

C.1 Shock variation across CZs

In Table C1 we present summary statistics describing the sources of variation in the employment shocks across US commuting zones (CZs). Recall from section 2.1 that we measure US employment changes facing Mexican-born workers in commuting zone d as

$$\sum_i \frac{Emp_{id}^M}{Emp_d^M} \left(\frac{Emp_{id}^{2010} - Emp_{id}^{2006}}{Emp_{id}^{2006}} \right), \tag{18}$$

where Emp_{id}^{year} is employment in industry i in destination commuting zone d and Emp_{id}^M / Emp_d^M is the share of Mexican-born workers in commuting zone d working in industry i in 2006.

Because this measure weights each industry based on its share of Mexican-born employment, Emp_{id}^M / Emp_d^M, industries with a larger share of Mexican-born employment have more influence on the shock measure. The first column of Table C1 lists each industry's share of Mexican-born employment at the national level, showing that Construction, Hotel and Dining, and Manufacturing account for the largest shares of Mexican employment in the US. The second column then reports the variance in each industry's employment share across US CZs. In this case, Agriculture, Construction, and Manufacturing are the top three sectors, indicating that these industries are more concentrated in a particular set of CZs than are other industries. Finally, the third column reports the cross-CZ variation in each industry's local employment growth from 2006 through 2010 (the term in parentheses in equation (18)). By far the largest entry is for manufacturing, indicating wide variation in local manufacturing employment growth across CZs. Administration and Education exhibit the next largest variance in local employment growth figures.

The information in Table C1 shows that there was substantial variation in employment growth within industries across locations, particularly in manufacturing, and that the employment mix of Mexican-born workers also differed across CZs. These two sources of variation combine to generate cross-CZ variation in the employment shock facing Mexican-born residents of each US location.

Table C1: Summary Statistics

Industry	Employment Share Mexican-born	Variance in Employment Share Mexican-born	Variance in Industry Employment Growth
Administration	8.826	0.080	0.097
Agriculture	5.736	0.220	0.080
Arts, Recreation	1.186	0.031	0.029
Construction	21.473	0.205	0.065
Education	2.580	0.134	0.093
Finance	1.185	0.015	0.002
Government	0.846	0.058	0.014
Health Care	4.454	0.141	0.044
Hotel, Dining	13.104	0.158	0.022
Information	0.631	0.042	0.009
Management	0.038	0.010	0.002
Manufacturing	16.701	0.247	0.387
Mining	0.312	0.033	0.022
Other Services	5.999	0.056	0.013
Real Estate	1.190	0.028	0.006
Retail Trade	7.527	0.107	0.009
Technical Services	1.043	0.030	0.006
Transportation	2.981	0.037	0.013
Utilities	0.213	0.006	0.002
Wholesale Trade	3.977	0.104	0.030

This table shows the distribution of Mexican workers across industries and the variation of employment shocks across locations for each industry. Column 1 shows the national employment distribution of Mexicans workers across industries. Column 2 shows variation in the share of Mexican-born workers across commuting zones working in each specific industry in 2006, while column 3 shows the geographic variation in shocks in each industry.

C.2 Subsets of controls

Table C2 shows results paralleling those in Table 4 but including controls for changes in the share of the population with different demographic and educational characteristics. Because the outcomes in Table 4 are measured using full-count tabulations at the municipio level rather than individual-level micro data, the appropriate way to control for potential changes in labor force composition is to include controls for changes in the shares of the local population with each characteristic. As shown in C2, the results in Table 4 are robust to including these compositional controls.

Tables C3 – C7 show results paralleling those in Tables 1 – 6, with different subsets of controls, as in Table 1. We discuss these results in detail in Appendix C.7 in the context of how the inclusion of pre-Recession controls influence the main findings.

Table C2: Employment-to-population Ratio and Earnings per Hour

	△ EPOP 2004-09	△ ln(Hours) 2004-09	△ ln(Earnings) 2004-09	△ ln(EarnPerHour) 2004-09
	(1)	(2)	(3)	(4)
Panel A. All				
US Employment Shock	-0.172*	-2.488*	-2.204	0.549
	[0.093]	[1.390]	[2.647]	[1.884]
	(0.119)	(1.288)	(2.638)	(2.362)
△ EPOP 1999-04	-0.084*			
	(0.044)			
△ ln(Hours) 1999-04		-0.113***	0.311***	0.437***
		(0.38)	(0.113)	(0.098)
△ ln(Earnings) 1999-04		0.060***	-0.200***	-0.259***
		(0.020)	(0.059)	(0.048)
Mean raw outcome among less affected	0.013	0.126	0.284	0.213
Implied shock impact	0.003	0.047	0.041	-0.010
State FE	Yes	Yes	Yes	Yes
Observations	865	846	846	846

This table examines the effects of declines in US labor demand on the 2004-2009 change in the employment-to-population ratio, earnings, hours worked, and earnings per hours in each municipio, using employment, earnings and hours from the 1999, 2004 and 2009 Mexican Economic Census and population from the 2000 and 2010 Mexican Census and the 2005 Conteo. We trim the bottom and top 1 percent of the earnings distribution. Columns (3) and (4) additionally include controls for changes in the share of the working age population who is female, by education level, age category, and employed in each industry from the 2005 and 2010 Mexican Census and the 20014 and 2009 Mexican Economic Census. All specifications in columns (1) to (4) use a GLS re-weighting procedure to address potential heteroskedasticity. All specifications include controls for anti-immigrant employment legislation and new 287(g) agreements across US CZs, trade shocks across municipios (divided by 1,000,000), share of employment in Mexico's non-tradable sector, changes in homicide rates across municipios, and Mexican state fixed effects. "Mean raw outcome among less affected" is the average of the dependent variable without dividing by exposure for municipios in the quartile with smallest magnitude US employment shocks. "Implied shock impact" provides the predicted difference in the outcome (without dividing by exposure) for municipios with the 90-10 percentile difference in shock size (0.075) and average exposure (0.25). Standard errors clustered at the Mexican Commuting Zone level are shown in parentheses. Due to the shift-share structure of the US Employment Shock, we also present Borusyak et al. (2022) standard errors for this variable in square brackets. *** p<0.01, ** p<0.05, * p<0.1 based on standard errors in brackets when present.

Table C3: Sex Ratio, Attainment, and Households Receiving Remittances

	△ Sex Ratio (F/M) 2005-10			△ Less than Primary 2005-10			△ Primary 2005-10			△ Secondary 2005-10			△ University 2005-10			Household Remittances 2010		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)
US Employment Shock	0.689*** (0.213)	0.550*** (0.192)	0.479** (0.200)	0.204* (0.119)	0.061 (0.102)	-0.019 (0.115)	0.303* (0.159)	0.061 (0.159)	0.049 (0.168)	-0.155* (0.084)	0.002 (0.071)	-0.028 (0.076)	-0.193*** (0.053)	-0.002 (0.053)	0.030 (0.062)	0.452*** (0.129)	0.399*** (0.113)	0.470*** (0.125)
Pre-shock Outcome		-0.228*** (0.032)	-0.224*** (0.032)	0.550***	0.541*** (0.023)	(0.025)	0.679***	0.713*** (0.070)	(0.067)	0.840***	0.838*** (0.037)	(0.037)	0.707***	0.705*** (0.035)	(0.035)	0.456***	0.447*** (0.045)	(0.045)
New 287g Policy			-0.035 (0.048)			-0.082*** (0.029)			0.083** (0.037)			-0.017 (0.018)			-0.001 (0.014)			0.003 (0.027)
Employment Policy			0.010 (0.037)			0.009 (0.021)			-0.006 (0.029)			-0.009 (0.012)			0.006 (0.011)			0.022 (0.018)
Trade Shock			-0.074*** (0.027)			-0.023* (0.013)			0.290*** (0.039)			-0.180*** (0.030)			-0.017 (0.022)			0.044** (0.020)
Non-tradable share of Employment			0.015 (0.022)			0.002 (0.013)			0.080*** (0.017)			-0.008 (0.010)			-0.030*** (0.007)			0.023* (0.013)
Homicide Rate 2005-10			10.482*** (3.664)			3.294** (1.641)			5.139*** (1.977)			0.401 (0.866)			-1.032 (0.966)			-4.623* (2.478)
State FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	866	866	866	866	866	866	866	866	866	866	866	866	866	866	866	866	866	866
R-squared	0.199	0.278	0.294	0.214	0.732	0.733	0.314	0.554	0.590	0.352	0.706	0.713	0.267	0.640	0.648	0.183	0.332	0.343

This table examines the effect of changes in US labor demand on the 2005-10 change in the female-to-male sex ratio for the working age population (15-64), the 2005-10 change in the share of the working age population in each education level for each Mexican source municipio, and the share of households receiving remittances in 2010. Note that outcome and pre-shock outcome variables are divided by exposure as in equation (7). We measure the sex ratio and educational attainment using the 2000 or 2010 Mexican Census or 2005 Inter-Censal Count. We calculate the share of households receiving remittances as the number of households reporting receiving income from relatives living abroad divided by the municipio's total number of households in the Census year, using the 2000 or 2010 Mexican Census. All specifications in columns (1) to (18) use a GLS re-weighting procedure to address potential heteroskedasticity. The positive coefficient estimate in column (3) for the US employment shock implies that municipios facing larger US employment declines had larger declines in the sex ratio, consistent with return migrants being disproportionately male. The coefficient of 0.483 in column (3), implies that the sex ratio in a municipio facing the 90th percentile shock fell by 0.009 more than in a municipio at the 10th percentile. The results in columns (4)-(15) show no statistically significant relationship between the shock and the share of population with any particular level of education. Column (18) shows a positive relationship between the share of households receiving remittances and the US employment shock, meaning that remittances fall significantly in Mexican source regions facing larger declines in US labor demand. The point estimate of 0.5 in column (18) implies that, a strongly affected municipio experienced nearly a 1 percentage point larger decline in the share of households receiving remittances compared to a less affected municipio. All specifications include Mexican state fixed effects. Standard errors clustered at the Mexican Commuting Zone level are shown in parentheses. *** p<0.01, ** p<0.05, * p<0.1

Table C4: Employment-to-population Ratio and Earnings per Hour (All Workers)

	△ EPOP 2004-09			△ ln(Hours) 2004-09			△ ln(Earnings) 2004-09			△ ln(EarnPerHour) 2004-09		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
US Employment Shock	-0.195	-0.292*	-0.366**	-2.254*	-2.461**	-2.511*	-2.463	-2.387	-2.763	-0.368	-0.120	-0.266
	(0.169)	(0.159)	(1.243)	(1.234)	(1.459)	(2.515)	(2.425)	(2.790)	(2.042)	(1.873)	(2.293)	
△ EPOP 1999-04		-0.517***	-0.511***									
		(0.117)	(0.116)									
△ ln(Hours) 1999-04					-0.126***	-0.159***		0.307**	0.262**		0.453***	0.435***
					(0.044)	(0.046)		(0.121)	(0.122)		(0.100)	(0.100)
△ ln(Earnings) 1999-04					0.059***	0.071***		-0.187***	-0.175***		-0.249***	-0.247***
					(0.022)	(0.023)		(0.063)	(0.062)		(0.050)	(0.049)
New 287g Policy			-0.004			0.562			2.081**			1.794***
			(0.052)			(0.465)			(0.823)			(0.668)
Employment Policy			-0.019			-0.202			-1.024**			-0.876**
			(0.243)			(0.479)			(0.394)			
Trade Shock			-0.361***			-0.575			0.145			0.769
			(0.085)			(0.367)			(0.781)			(0.478)
Non-tradable share of Employment			0.073**			0.610**			0.981*			0.429
			(0.032)			(0.246)			(0.505)			(0.341)
Homicide Rate 05-10			1.390			-24.375			-76.937*			-44.905
			(2.671)			(19.299)			(40.389)			(29.723)
State FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	865	865	865	848	846	846	848	846	846	848	846	846
R-squared	0.077	0.302	0.325	0.129	0.143	0.160	0.112	0.139	0.159	0.070	0.157	0.175

This table examines the effects of declines in US labor demand on the 2004-2009 change in the employment-to-population ratio, earnings, hours worked, and earnings per hour in each municipio, using employment, earnings, and hours from the 1999, 2004 and 2009 Mexican Economic Census and population from the 2000 and 2010 Mexican Census and the 2005 Conteo. Note that the outcome and pre-shock outcome variables are divided by exposure as in equation (7). We trim the bottom and top 1 percent of the earnings distribution. All specifications in columns (1) to (12) use a GLS re-weighting procedure to address potential heteroskedasticity. The negative and significant coefficient estimate for the US employment shock in column (3) implies that regions facing larger US employment declines exhibited larger increases in the employment to population ratio. Columns (6) and (9) show that both total hours worked and total earnings increased in the most affected municipios. However, column (12) shows no effect on earnings per hour, implying that local labor markets adjusted to the increase in supply of hours worked without reducing wages. All specifications include Mexican state fixed effects. Standard errors clustered at the Mexican Commuting Zone level are shown in parentheses. *** p<0.01, ** p<0.05, * p<0.1

Table C5: Employment-to-population Ratio by Gender

	△ EPOP Women 2004-09			△ EPOP Men 2004-09		
	(1)	(2)	(3)	(4)	(5)	(6)
US Employment Shock	-0.215	-0.411**	-0.563***	-0.160	-0.176	-0.112
	(0.159)	(0.159)	(0.177)	(0.220)	(0.192)	(0.236)
△ EPOP 1999-04		-0.584***	-0.577***		-0.410***	-0.408***
		(0.159)	(0.159)		(0.089)	(0.087)
New 287g Policy			-0.059			0.061
			(0.045)			(0.074)
Employment Policy			-0.044			0.024
			(0.032)			(0.043)
Trade Shock			-0.008			-0.737***
			(0.107)			(0.106)
Non-tradable share of Employment			0.040			0.109***
			(0.032)			(0.041)
Homicide Rate 05-10			-0.325			3.581
			(2.506)			(3.628)
State FE	Yes	Yes	Yes	Yes	Yes	Yes
Observations	866	865	865	866	865	865
R-squared	0.098	0.315	0.319	0.058	0.251	0.314

This table examines the effects of declines in US labor demand on the 2004-2009 change in the employment-to-population ratio for women and men in each municipio, using employment from the 1999, 2004 and 2009 Mexican Economic Census and population from the 2000 and 2010 Mexican Census and the 2005 Conteo. Note that the outcome and pre-shock outcome variables are divided by exposure as in equation (7). We trim the bottom and top 1 percent of the earnings distribution. All specifications in columns (1) to (6) use a GLS re-weighting procedure to address potential heteroskedasticity. The coefficient of -0.663 in column (3) implies that a strongly affected municipio with average exposure to the US experienced a 1.2 percentage point larger increase in employment to population ratio among women compared to a similar municipio that was less affected. All specifications include Mexican state fixed effects. Standard errors clustered at the Mexican Commuting Zone level are shown in parentheses. *** p<0.01, ** p<0.05, * p<0.1

Table C6: Appliance Ownership

	△ Computer 2005-10			△ Washing Machine 2005-10			△ Refrigerator 2005-10			△ TV 2005-10		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
US Employment Shock	-0.360**	-0.022	-0.122	0.031	0.171	0.057	-0.197	0.233	0.211	0.121	0.453***	0.474**
	(0.145)	(0.085)	(0.101)	(0.215)	(0.198)	(0.226)	(0.232)	(0.198)	(0.225)	(0.178)	(0.165)	(0.184)
△ in Outcome 2000-05		0.876***	0.873***		0.294***	0.279***		0.341***	0.337***		0.394***	0.400***
		(0.022)	(0.022)		(0.020)	(0.021)		(0.020)	(0.022)		(0.026)	(0.027)
New 287g Policy			-0.030			0.064			0.052			0.012
			(0.056)			(0.057)			(0.048)			
Employment Policy			-0.036			-0.079**			-0.028			0.012
			(0.023)			(0.039)			(0.041)			(0.033)
Trade Shock			-0.057			0.025			0.057			0.044
			(0.040)			(0.056)			(0.041)			(0.031)
Non-tradable share of Employment			-0.019			-0.045			-0.011			0.012
			(0.029)			(0.037)			(0.030)			
Homicide Rate 05-10			-0.920			0.512			1.418			5.125*
			(1.516)			(2.906)			(2.778)			(2.820)
State FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	866	866	866	866	866	866	866	866	866	866	866	866
R-squared	0.331	0.847	0.848	0.446	0.576	0.580	0.344	0.545	0.546	0.230	0.496	0.500

This table examines the effect of changes in US labor demand on the 2005-10 change in ownership of household durables (personal computers, washing machines, refrigerators, and televisions). We calculate the change in the share households owning the relevant household durable using the 2000 or 2010 Mexican Census or 2005 Conteo. All specifications in columns (1) to (12) use a GLS re-weighting procedure to address potential heteroskedasticity. The coefficient in column (12) is positive and statistically significant, implying that households in more negatively affected municipios slowed down their purchases of televisions. All specifications include Mexican state fixed effects. Standard errors clustered at the Mexican Commuting Zone level are shown in parentheses. *** p<0.01, ** p<0.05, * p<0.1

Table C7: School Attendance

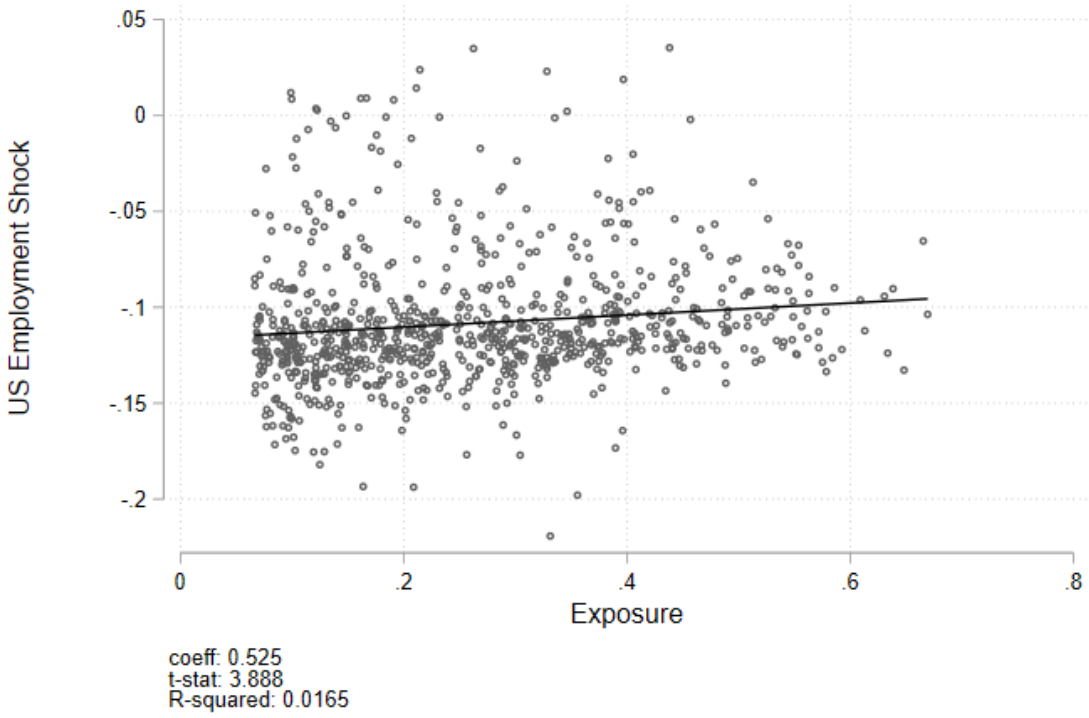
	△ Attendance Rate (ages 6-12) 2005-10			△ Attendance Rate (ages 13-15) 2005-10			△ Attendance Rate (ages 16-18) 2005-10		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
US Employment Shock	0.143**	0.137**	0.200***	-0.016	0.107	0.371	-0.280	-0.078	0.011
	(0.066)	(0.067)	(0.070)	(0.205)	(0.204)	(0.246)	(0.205)	(0.206)	(0.241)
△ in Outcome 2000-05		-0.013	-0.016		0.126***	0.114***		0.193***	0.176***
		(0.024)	(0.024)		(0.027)	(0.028)		(0.026)	(0.027)
New 287g Policy			0.025			0.086			0.035
			(0.017)			(0.058)			(0.058)
Employment Policy			0.013			0.053			0.002
			(0.012)			(0.040)			(0.038)
Trade Shock			0.040***			0.115***			-0.010
			(0.013)			(0.027)			(0.037)
Non-tradable share of Employment			-0.008			-0.055**			-0.086***
			(0.008)			(0.026)			(0.030)
Homicide Rate 05-10			-0.957			-7.930**			-3.250
			(1.176)			(4.008)			(4.501)
State FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	866	866	866	866	866	866	866	866	866
R-squared	0.085	0.086	0.096	0.269	0.288	0.305	0.269	0.323	0.330

This table examines the effect of changes in US labor demand on the 2005-10 change in school attendance. We calculate the change in the share of the population in primary (age 6-12), secondary (13-15), and high-school (16-18) reporting having attended school using the 2000 or 2010 Mexican Census or 2005 Conteo. All specifications in columns (1) to (9) use a GLS re-weighting procedure to address potential heteroskedasticity. The coefficient of 0.25 in column (3) implies that a municipio facing a 6.5 percentage point decline in US labor demand experienced 0.4 percentage point larger declines in school attendance for primary school children. This means that in municipios experiencing larger US employment declines, school attendance for primary school children fell more relative to municipios facing smaller employment shocks. All specifications include Mexican state fixed effects. Standard errors clustered at the Mexican Commuting Zone level are shown in parentheses. *** p<0.01, ** p<0.05, * p<0.1

C.3 Shock variation conditional on exposure

Figure C1 shows a scatter plot relating the US employment shock to exposure, ξ_s, for the municipios in our sample. Although the two are positively related, with modestly higher average US employment shocks in municipios with higher exposure to the US labor market, the extensive variability in US employment shock within narrow ranges of exposure is clearly visible in the scatter plot. The R-squared for a linear regression relating the two quantities is only 0.019.

Figure C1: Exposure vs. US Employment Shock Measure



This figure shows the relationship between exposure to the US labor market and the UUS Employment Shock measure across Mexican *municipios*.

C.4 Unweighted Analysis

Tables C8 – C14 show results paralleling those in the main text without the GLS weighting procedure used to address potential heteroskedasticity resulting from dividing the dependent variable by the municipio's estimated exposure to the US labor market. In nearly all cases, we reject the null hypothesis of homoskedastic errors at standard levels using a Breusch-Pagan test, the weighted and unweighted point estimates are very similar, and the weighted standard errors are smaller than the unweighted ones.

Table C8: Population Growth, Return Migration, and Emigration (unweighted)

	Population Growth 2005-10			Return Migration 2005-10			Emigration 2005-10		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
US Employment Shock	-3.331***	-0.568	-0.473	-0.236***	-0.296***	-0.213***	0.189	0.196	0.261*
	(0.869)	(0.812)	(0.858)	(0.086)	(0.074)	(0.079)	(0.127)	(0.125)	(0.134)
Pre-shock Outcome		0.848***	0.834***		1.693***	1.673***		0.116***	0.108***
		(0.177)	(0.175)		(0.274)	(0.273)		(0.027)	(0.027)
New 287g Policy			0.105			0.077***			0.035
			(0.193)			(0.020)			(0.028)
Employment Policy			-0.071			-0.012			-0.003
			(0.114)			(0.013)			(0.019)
Trade Shock			-0.203			0.020**			0.053***
			(0.270)			(0.009)			(0.016)
Non-tradable share of Employment			-0.284**			-0.012			0.007
			(0.121)			(0.008)			(0.015)
Homicide Rate 05-10			-25.525*			-4.995***			-7.303***
			(13.760)			(1.177)			(2.686)
State FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	866	866	866	866	866	866	866	866	866
R-squared	0.143	0.634	0.639	0.302	0.518	0.540	0.246	0.272	0.287
B-P het. p-val	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

This table examines the effect of changes in US labor demand on the 2005-10 population growth, return migration to, and emigration from each Mexican source municipio. Note that outcome and pre-shock outcome variables are divided by exposure as in equation (7). We restrict attention to individuals age 15-64. Population growth is defined as the proportional change in population. Return migration is the number of individuals reporting living in the US 5 years prior to the relevant survey, divided by the municipio population in the survey year, while emigration is the number of household members who left for the US during the 5 years prior to the relevant survey, divided by the initial municipio population, measured using the roughly 10% long-form sample from the 2000 or 2010 Census (emigration information is not available in 2005). We use full-count tabulations from the 2000 or 2010 Mexican Census or 2005 Conteo to calculate population growth and return migration. The "Pre-shock Outcome" controls in columns (2), (5), and (8) are 2000-2005 population growth, 2000-2005 return migration, and 1995-2000 emigration, respectively. Columns (3), (6), and (9) additionally control for anti-immigrant employment legislation and new 287(g) agreements across US CZs, trade shocks across municipios (divided by 1,000,000), share of employment in Mexico's non-tradable sector, and changes in homicide rates across municipios. All specifications control for Mexican state fixed effects, and standard errors clustered at the Mexican commuting zone level are shown in parentheses. *** p<0.01, ** p<0.05, * p<0.1

Table C9: Population Growth Decomposition (unweighted)

	Population Growth 2005-10			Return Migration 2005-10			Emigration 2005-10			Net Migration 2005-10			Population aging in and out 2005-10			Residual 2005-10			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	
US Employment Shock	-3.331***	-0.039	0.169	-0.236***	-0.250***	-0.174**	0.189	0.211*	0.280**	-0.126	0.511	0.933	-2.694***	-0.178	-0.216	-0.086	0.089	-0.093	
	(0.869)	(0.736)	(0.747)	(0.086)	(0.065)	(0.072)	(0.127)	(0.118)	(0.125)	(0.453)	(0.554)	(0.604)	(0.756)	(0.142)	(0.164)	(0.601)	(0.625)	(0.723)	
Population Growth		0.737***	0.728***		-0.007*	-0.007*		-0.023***	-0.023***		0.385**	0.386**		0.012	0.012		0.324***	0.315***	
2000-05		(0.259)	(0.257)		(0.004)	(0.004)		(0.005)	(0.005)		(0.191)	(0.192)		(0.010)	(0.010)		(0.082)	(0.079)	
Return Migration		-3.687*	-3.670*		1.231***	1.220***		1.073***	1.051***		-2.041	-2.117		0.122	0.131		-1.926	-1.853	
Rate 2000-05		(1.933)	(1.891)		(0.284)	(0.282)		(0.337)	(0.326)		(1.532)	(1.517)		(0.389)	(0.395)		(1.645)	(1.658)	
Emigration Rate		0.724***	0.710***		0.167***	0.161***		0.064*	0.058*		0.478***	0.445**		-0.058	-0.055		0.201	0.217	
1995-00		(0.252)	(0.246)		(0.038)	(0.037)		(0.033)	(0.032)		(0.178)	(0.177)		(0.044)	(0.044)		(0.174)	(0.177)	
Net Migration Rate		0.115**	0.111**		0.011**	0.013**		0.005	0.006		0.791***	0.796***		0.012	0.012		-0.695***	-0.703***	
2000-05		(0.050)	(0.046)		(0.006)	(0.006)		(0.004)	(0.004)		(0.176)	(0.176)		(0.009)	(0.008)		(0.202)	(0.198)	
Population aging		0.273*	0.268*		0.018***	0.015***		0.048***	0.047***		-0.151	-0.160		0.893***	0.894***		-0.439***	-0.433***	
in and out 2000-05		(0.151)	(0.156)		(0.005)	(0.005)		(0.009)	(0.010)		(0.116)	(0.119)		(0.016)	(0.016)		(0.071)	(0.072)	
New 287g Policy			-0.047			0.067***			0.012			0.234			-0.028			-0.308*	
			(0.197)			(0.018)			(0.027)			(0.165)			(0.034)			(0.167)	
Employment Policy			0.073			-0.005			0.013			0.030			0.001			0.060	
			(0.127)			(0.012)			(0.020)			(0.109)			(0.027)			(0.109)	
Trade Shock			-0.202			0.023**			0.043**			0.145			-0.021			-0.306***	
			(0.264)			(0.009)			(0.019)			(0.185)			(0.014)			(0.111)	
Nontradable			-0.240*			-0.011			0.016			-0.026			-0.009			-0.178	
			(0.127)			(0.008)			(0.013)			(0.088)			(0.017)			(0.110)	
Homicide Rate			-20.664			-4.009***			-6.493***			-26.535***			2.664			0.724	
2005-10			(13.727)			(1.047)			(1.847)			(9.103)			(2.468)			(15.790)	
Observations	866	866	866	866	866	866	866	866	866	866	866	866	866	866	866	866	866	866	866
R-squared	0.143	0.660	0.663	0.302	0.605	0.620	0.246	0.358	0.370	0.051	0.605	0.609	0.334	0.979	0.979	0.115	0.492	0.498	

This table examines the effect of changes in US labor demand on the 2005-10 population growth and its components, including: return migration to, and emigration from each Mexican source municipio, internal net migration, and population aging in and out of the working age population. Note that outcome and pre-shock outcome variables are divided by exposure as in equation (7). We restrict attention to individuals age 15-64. Population growth is defined as the proportional change in population. Return migration is the number of individuals reporting living in the US 5 years prior to the relevant survey, divided by the municipio population in the survey year, while emigration is the number of household members who left for the US during the 5 years prior to the relevant survey, divided by the initial municipio population, measured using the roughly 10% long-form sample from the 2000 or 2010 Census (emigration information is not available in 2005). Internal net migration at the municipio level is calculated as the difference between each municipio's immigrants and emigrants during the 5 years prior to the to the relevant survey, divided by the initial municipio population, measured using the roughly 10% long-form sample from the 2000 or 2010 Census (internal migration information is not available in 2005). We use full-count tabulations from the 2000 or 2010 Mexican Census or 2005 Conteo to calculate population growth, return migration, and population aging in and out. The "Pre-shock Outcome" controls in columns (2), (5), (8), (11), (14) are 2000-2005 population growth, 2000-2005 return migration, 1995-2000 emigration, 1995-2000 net migration, and 2000-2005 population aging in and out, respectively. All specifications control for Mexican state fixed effects, and standard errors clustered at the Mexican commuting zone level are shown in parentheses. Standard errors clustered at the Mexican Commuting Zone level are shown in parentheses. *** p<0.01, ** p<0.05, * p<0.1

Table C10: Sex Ratio, Attainment, and Households Receiving Remittances (unweighted)

	△ Sex Ratio (F/M) 2005-10			△ Less than Primary 2005-10			△ Primary 2005-10			△ Secondary 2005-10			△ University 2005-10			Household Remittances 2010		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)
US Employment Shock	0.763***	0.644***	0.589**	0.942***	0.174	0.131	-0.215	0.003	0.159	-0.450**	0.117	0.010	-0.336**	-0.048	-0.018	0.504***	0.428***	0.510***
	(0.235)	(0.219)	(0.253)	(0.293)	(0.155)	(0.177)	(0.361)	(0.269)	(0.283)	(0.200)	(0.124)	(0.139)	(0.159)	(0.093)	(0.110)	(0.137)	(0.120)	(0.133)
Pre-shock Outcome		-0.177***	-0.175***		0.586***	0.583***		0.856***	0.865***		0.899***	0.907***		0.780***	0.778***		0.459***	0.450***
		(0.035)	(0.035)		(0.025)	(0.026)		(0.060)	(0.061)		(0.046)	(0.047)		(0.066)	(0.067)		(0.046)	(0.046)
New 287g Policy			-0.083			-0.080**			0.160***			-0.093**			-0.019			0.008
			(0.072)			(0.040)			(0.061)			(0.039)			(0.030)			(0.028)
Employment Policy			0.043			0.019			0.022			-0.000			0.016			0.024
			(0.044)			(0.028)			(0.040)			(0.022)			(0.019)			(0.018)
Trade Shock			-0.075**			-0.033			0.311***			-0.186***			-0.020			0.048**
			(0.030)			(0.031)			(0.069)			(0.033)			(0.029)			(0.023)
Non-tradable share			0.035			-0.002			0.109***			-0.003			-0.046***			0.020
			(0.027)			(0.017)			(0.030)			(0.019)			(0.013)			(0.014)
Homicide Rate 05-10 of Employment			10.418**			1.033			12.770***			-0.139			-1.196			-5.118**
			(4.589)			(3.103)			(4.824)			(1.904)			(1.663)			(2.505)
State FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	866	866	866	866	866	866	866	866	866	866	866	866	866	866	866	866	866	866
R-squared	0.197	0.251	0.262	0.315	0.792	0.793	0.298	0.655	0.672	0.356	0.732	0.740	0.241	0.735	0.739	0.187	0.334	0.343
B-P het. p-val	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00

This table examines the effect of changes in US labor demand on the 2005-10 change in the female to male sex ratio for the working age population (15-64), the 2005-10 change in the share of the working age population in each education level for each Mexican source municipio, and the share of households receiving remittances in 2010. Note that outcome and pre-shock outcome variables are divided by exposure as in equation (7). We measure the sex ratio and educational attainment using the 2000 or 2010 Mexican Census or 2005 Inter-Censal Count. We calculate the share of households receiving remittances as the number of households reporting receiving income from relatives living abroad divided by the municipio's total number of households in the Census year, using the 2000 or 2010 Mexican Census. The positive coefficient estimate in column (3) for the US employment shock implies that municipios facing larger US employment declines had larger declines in the sex ratio, consistent with return migrants being disproportionately male. The results in columns (6)-(15) show no statistically significant relationship between the shock and the share of population with any particular level of education. Column (18) shows a positive relationship between the share of households receiving remittances and the US employment shock, meaning that remittances fall significantly in Mexican source regions facing larger declines in US labor demand. All specifications include Mexican state fixed effects. Standard errors clustered at the Mexican Commuting Zone level are shown in parentheses. *** p<0.01, ** p<0.05, * p<0.1

Table C11: Employment-to-population Ratio and Earnings per Hour (All Workers, unweighted)

	△ EPOP 2004-09			△ ln(Hours) 2004-09			△ ln(Earnings) 2004-09			△ ln(EarnPerHour) 2004-09		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
US Employment Shock	-0.116	-0.307	-0.759	-7.969**	-8.472**	-9.226**	-9.566**	-8.264*	-9.875**	-1.596	0.208	-0.649
	(0.686)	(0.537)	(0.505)	(3.829)	(3.755)	(3.805)	(4.726)	(4.524)	(4.973)	(4.209)	(3.853)	(4.279)
△ EPOP 99-04		-0.376**	-0.360**									
		(0.145)	(0.145)									
△ ln(Hours) 99-04					-0.124**	-0.146**		0.331**	0.290**		0.454***	0.436***
					(0.061)	(0.062)		(0.148)	(0.146)		(0.122)	(0.122)
△ ln(Earnings) 99-04					0.067**	0.078**		-0.177**	-0.159**		-0.244***	-0.237***
					(0.034)	(0.035)		(0.069)	(0.069)		(0.054)	(0.053)
New 287g Policy			-0.236*			0.410			2.962**			2.552***
			(0.135)			(0.755)			(1.390)			(0.967)
Employment Policy			-0.052			-0.453			-2.285***			-1.833***
			(0.077)			(0.425)			(0.865)			(0.650)
Trade Shock			-0.374***			-0.743			-0.005			0.739
			(0.101)			(0.536)			(1.046)			(0.623)
Non-tradable share of employment			0.315***			1.227***			2.229***			1.002*
			(0.086)			(0.404)			(0.794)			(0.558)
Homicide Rate 05-10			-8.203			-46.380			-129.179*			-82.799
			(8.258)			(46.328)			(70.689)			(58.155)
State FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	865	865	865	848	846	846	848	846	846	848	846	846
R-squared	0.102	0.205	0.244	0.119	0.132	0.149	0.114	0.138	0.161	0.086	0.160	0.175
B-P het. p-val	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.003	0.003

This table examines the effects of declines in US labor demand on the 2004-2009 change in the employment-to-population ratio, earnings, hours worked, and earnings per hour in each municipio, using employment, earnings, and hours from the 1999, 2004 and 2009 Mexican Economic Census and population from the 2000 and 2010 Mexican Census and the 2005 Conteo. Note that the outcome and pre-shock outcome variables are divided by exposure as in equation (7). We trim the bottom and top 1 percent of the earnings distribution. The negative and significant coefficient estimate for the US employment shock in column (3) implies that regions facing larger US employment declines exhibited larger increases in the employment to population ratio. Columns (6) and (9) show that both total hours worked and total earnings increased in the most affected municipios. However, column (12) shows no effect on earnings per hour, implying that local labor markets adjusted to the increase in supply of hours worked without reducing wages. All specifications include Mexican state fixed effects. Standard errors clustered at the Mexican Commuting Zone level are shown in parentheses. *** p<0.01, ** p<0.05, * p<0.1

Table C12: Employment-to-population Ratio by Gender (unweighted)

	△ EPOP Women 2004-09			△ EPOP Men 2004-09		
	(1)	(2)	(3)	(4)	(5)	(6)
US Employment Shock	-0.327	-0.663	-1.126**	0.015	-0.072	-0.409
	(0.715)	(0.483)	(0.484)	(0.688)	(0.613)	(0.591)
△ EPOP 99-04		-0.545***	-0.525***		-0.286**	-0.273**
		(0.167)	(0.157)		(0.114)	(0.108)
New 287g Policy			-0.269**			-0.139
			(0.136)			(0.145)
Employment Policy			-0.086			-0.021
			(0.074)			(0.084)
Trade Shock			0.028			-0.733***
			(0.107)			(0.147)
Non-tradable share of Employment			0.237***			0.366***
			(0.071)			(0.100)
Homicide Rate 05-10			-12.321			-4.389
			(9.571)			(8.620)
State FE	Yes	Yes	Yes	Yes	Yes	Yes
Observations	866	865	865	866	865	865
R-squared	0.128	0.302	0.325	0.082	0.158	0.204
B-P het. p-val	0.000	0.000	0.000	0.000	0.000	0.000

This table examines the effects of declines in US labor demand on the 2004-2009 change in the employment-to-population ratio for women and men in each municipio, using employment from the 1999, 2004 and 2009 Mexican Economic Census and population from the 2000 and 2010 Mexican Census and the 2005 Conteo. Note that the outcome and pre-shock outcome variables are divided by exposure as in equation (7). We trim the bottom and top 1 percent of the earnings distribution. The negative coefficient in colum (3) implies that a strongly affected municipio experienced larger increase in employment to population ratio among women compared to a similar municipio that was less affected. All specifications include Mexican state fixed effects. Standard errors clustered at the Mexican Commuting Zone level are shown in parentheses. *** p<0.01, ** p<0.05, * p<0.1

Table C13: Appliance Ownership (unweighted)

	△ Computer 2005-10			△ Washing Machine 2005-10			△ Refrigerator 2005-10			△ TV 2005-10		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
US Employment Shock	-0.689*	-0.062	-0.012	-0.657	-0.083	-0.088	-1.070**	-0.087	-0.163	-0.636	0.523*	0.378
	(0.380)	(0.166)	(0.204)	(0.435)	(0.372)	(0.434)	(0.487)	(0.378)	(0.443)	(0.398)	(0.292)	(0.342)
△ in Outcome 2000-05		0.893***	0.893***		0.320***	0.314***		0.355***	0.354***		0.473***	0.479***
		(0.034)	(0.033)		(0.026)	(0.027)		(0.035)	(0.035)		(0.036)	(0.036)
New 287g Policy			0.043			0.208**			0.282**			0.102
			(0.057)			(0.097)			(0.122)			(0.086)
Employment Policy			-0.001			-0.101			-0.153*			-0.074
			(0.038)			(0.067)			(0.082)			(0.056)
Trade Shock			-0.049			0.125			0.120			0.016
			(0.067)			(0.104)			(0.097)			(0.035)
Non-tradable share of Employment			-0.051**			-0.032			0.099*			0.098**
			(0.024)			(0.045)			(0.054)			(0.050)
Homicide Rate 05-10			0.612			3.245			3.897			18.014**
			(2.657)			(4.922)			(5.242)			(8.736)
State FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	866	866	866	866	866	866	866	866	866	866	866	866
R-squared	0.338	0.883	0.883	0.574	0.678	0.680	0.422	0.599	0.605	0.246	0.559	0.568
B-P het. p-val	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

This table examines the effect of changes in US labor demand on the 2005-10 change in ownership of household durables (personal computers, washing machines, refrigerators, and televisions). We calculate the change in the share households owning the relevant household durable using the 2000 or 2010 Mexican Census or 2005 Conteo. The coefficient in column (12) is positive and statistically significant, implying that households in more negatively affected municipios slowed down their purchases of televisions. All specifications include Mexican state fixed effects. Standard errors clustered at the Mexican Commuting Zone level are shown in parentheses. *** p<0.01, ** p<0.05, * p<0.1

Table C14: School Attendance (unweighted)

	△ Attendance Rate (ages 6-12) 2005-10			△ Attendance Rate (ages 13-15) 2005-10			△ Attendance Rate (ages 16-18) 2005-10		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
US Employment Shock	0.046	0.050	0.127	-0.166	0.135	0.350	-0.060	0.431	0.533
	(0.117)	(0.115)	(0.122)	(0.327)	(0.330)	(0.383)	(0.431)	(0.419)	(0.463)
△ in Outcome 2000-05		0.005	0.004		0.162***	0.152***		0.286***	0.272***
		(0.029)	(0.030)		(0.034)	(0.033)		(0.034)	(0.034)
New 287g Policy			0.004			0.113			0.144
			(0.025)			(0.094)			(0.095)
Employment Policy			0.030			0.020			-0.038
			(0.021)			(0.059)			(0.068)
Trade Shock			0.049**			0.104***			-0.038
			(0.023)			(0.039)			(0.057)
Non-tradable share of Emplyment			-0.008			-0.090***			-0.130***
			(0.013)			(0.035)			(0.048)
Homicide Rate 05-10			-0.688			-8.664*			-5.735
			(1.888)			(4.834)			(6.990)
State FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	866	866	866	866	866	866	866	866	866
R-squared	0.092	0.092	0.099	0.221	0.269	0.279	0.241	0.358	0.367
B-P het. p-val	0.111	0.045	0.021	0.000	0.000	0.000	0.000	0.000	0.000

This table examines the effect of changes in US labor demand on the 2005-10 change in school attendance. We calculate the change in the share of the population in primary (age 6-12), secondary (13-15), and high-school (16-18) reporting having attended school using the 2000 or 2010 Mexican Census or 2005 Conteo. The positive coefficient in column (3) implies that in municipios experiencing larger US employment declines, school attendance for primary school children fell more relative to municipios facing smaller employment shocks. All specifications include Mexican state fixed effects. Standard errors clustered at the Mexican Commuting Zone level are shown in parentheses. *** p<0.01, ** p<0.05, * p<0.1

C.5 Municipios' baseline characteristics by primary US destination

Table C15 examines the baseline characteristics of municipios based on their migrants' primary US destinations, as reported in the MCAS data. We first assign each municipio to one of either California, Illinois, or Texas based on which US state accounts for the largest share of the municipio's US migrants (these three states are by far the most important destinations for Mexican-born migrants in the US). Table C15 then reports average demographic, educational, and economic characteristics for each group of municipios. The observable municipio characteristics are very similar across the three groups, supporting the "exogenous shares" approach to shift-share causal inference proposed by Goldsmith-Pinkham et al. (2020).

Table C15: *Municipios'* baseline characteristics

	California	Illinois	Texas
Sex	51.529	52.207	50.923
Ages 15-19	10.900	10.469	10.331
Ages 20-24	8.629	8.240	8.357
Ages 25-29	7.209	6.985	7.219
Ages 30-34	6.363	6.228	6.569
Ages 35-39	5.790	5.669	5.843
Ages 40-44	4.799	4.747	4.926
Ages 45-49	3.905	3.920	3.983
Ages 50-54	3.364	0.478	0.570
Ages 55-59	2.755	2.920	0.967
Ages 60-64	2.486	2.682	2.789
Less than primary completed	52.090	54.471	50.716
Primary completed	39.949	38.728	40.797
Secondary completed	5.716	4.835	5.996
University completed	2.246	1.966	2.492
Employed	44.924	43.242	42.269
Unemployed	0.510	0.454	0.474
Not in labor force	54.566	56.304	57.257
Self-employed	32.210	32.285	27.678
Wage/salary worker	58.530	57.310	63.800
Unpaid worker	9.260	10.405	8.521
Total	560	38	164
Observations	762	762	762

This table shows descriptive evidence on the baseline characteristics of *municipios* with primary connections to California, Illinois, and Texas, using data from the 2000 Mexican Census. *Municipios* are assigned to one of the US states in each column based on their largest connection as represented by the migrant network from the MCAS data. The similar distribution of baseline characteristics for each US state suggests that equal counterfactual trends assumption is plausible.

C.6 Mexican Commuting Zone Analysis for Labor Market Outcomes

For consistency with the rest of the analysis, the labor market outcome results in Table 4 use Mexican municipio as the unit of analysis. Here, we provide a parallel analysis using Mexican commuting zones as the unit of analysis, in order to address the possibility that municipios in the same commuting zone may be part of an integrated labor market in equilibrium. We define Mexican commuting zones following Atkin (2016), and impose the same sample restrictions to commuting zones that we did to municipios in the main text: at least 5,000 residents in 2005, exposure $\xi_s > 0.066$ (the 25th percentile), and at least 100 MCAS cards in 2006. This yields a sample of 741 Mexican commuting zones (and 723 with information in the Economic Census). The results in Table C16 are extremely similar to those in Table 4, showing that the choice of Mexican market aggregation does not substantially affect our findings.

Table C16: Employment-to-population Ratio and Earnings per Hour

	△ EPOP 2004-09	△ ln(Hours) 2004-09	△ ln(Earnings) 2004-09	△ ln(EarnPerHour) 2004-09
	(1)	(2)	(3)	(4)
Panel A. All				
US Employment Shock	-0.375**	-3.554***	-3.422	0.117
	(0.184)	(1.323)	(2.672)	(2.199)
△ EPOP 1999-04	-0.534***			
	(0.104)			
△ ln(Hours) 1999-04		-0.183***	0.198	0.399***
		(0.049)	(0.131)	(0.104)
△ ln(Earnings) 1999-04		0.054**	-0.174**	-0.231***
		(0.027)	(0.072)	(0.054)
Panel B. Women				
US Employment Shock	-0.547***			
	(0.202)			
△ EPOP Women 1999-04	-0.612***			
	(0.151)			
Panel C. Men				
US Employment Shock	-0.260			
	(0.215)			
△ EPOP Men 1999-04	-0.409***			
	(0.088)			
State FE	Yes	Yes	Yes	Yes
Observations	741	723	723	723

This table examines the effects of declines in US labor demand on the 2004-2009 change in the employment-to-population ratio, earnings, hours worked, and earnings per hours in each Mexican commuting zone level, using employment, earnings and hours from the 1999, 2004 and 2009 Mexican Economic Census and population from the 2000 and 2010 Mexican Census and the 2005 Conteo. Note that the outcome and pre-shock outcome variables are divided by exposure as in equation (7). We trim the bottom and top 1 percent of the earnings distribution. All specifications in columns (1) to (4) use a GLS re-weighting procedure to address potential heteroskedasticity. All specifications include controls for anti-immigrant employment legislation and new 287(g) agreements across US CZs, trade shocks across municipios (divided by 1,000,000), share of employment in Mexico's non-tradable sector, changes in homicide rates across municipios, and Mexican state fixed effects. Robust standard errors (equivalent to clustering at the Mexican commuting zone level) are shown in parentheses. *** p<0.01, ** p<0.05, * p<0.1

C.7 Pre-shock placebo tests

As discussed in Section 5.1.4 in the main text, an analysis of the relationship between the pre-shock values of the outcomes we study and the future shock that municipios eventually experience aids in the interpretation of our analysis. In the same way that Table 2 provides pre-trend analysis for Table 1, Tables C17 – C21 provide pre-trend analysis for the outcomes from Tables C29 – 6.

Table C17 shows the placebo tests corresponding to the pre-shock outcome controls in Table 3. It is also helpful to compare the placebo test results to Table C3, which presents the main analysis with and without the pre-Recession controls to see how their inclusion affects the results. We find meaningful pre-Recession relationships for the change in sex ratio, and the primary, secondary, and university educational attainment shares. Introducing these pre-Recession controls in to Table C3 has a nontrivial effect on the educational attainment coefficients. While the pre-Recession control for the sex ratio does reduce the magnitude of the contemporaneous coefficient somewhat, it does not qualitatively change the conclusion. Importantly, there is no evidence of a pre-Recession relationship for household remittances.

Table C18 shows the placebo tests corresponding to the pre-shock outcome controls in Panel A of Table 4. It is also helpful to compare the placebo test results to Table C4, which presents the main analysis with and without the pre-Recession controls to see how their inclusion affects the results. We find minimal sign of pre-Recession outcome relationships in Table C18 for employment, hours, and earnings outcomes, which is consistent with the stable coefficients across columns in Table C4.

Table C19 shows the placebo tests corresponding to the pre-shock outcome controls in Panel B of Table 4, separately by gender. It is also helpful to compare the placebo test results to Table C5, which presents the main analysis with and without the pre-Recession controls to see how their inclusion affects the results. While there is little sign of a pre-Recession relationship for the employment-to-population ratio for men, there is an apparent relationship for women. Nonetheless, the inclusion of the pre-Recession control in Table C5 does not qualitatively change the relationship between the change in women's employment-to-population ratio and the US employment shock faced by their municipio, although it does increase the precision of the estimates.

Table C20 shows the placebo tests corresponding to the pre-shock outcome controls in columns (1)-(4) of Table 6, examining appliance ownership. It is also helpful to compare the placebo test results to Table C6, which presents the main analysis with and without the pre-Recession controls to see how their inclusion affects the results. Table C20 finds nontrivial pre-Recession relationships between the change in ownership and subsequent US employment shocks for all appliances. This pattern corresponds to the nontrivial changes in the coefficient estimates in Table C6 when introducing the pre-Recession controls. We therefore interpret the results on Television ownership in Table 6 with caution.

Table C21 shows the placebo tests corresponding to the pre-shock outcome controls in columns (5)-(7) of Table 6, examining schooling attendance rates. It is also helpful to compare the placebo test results to Table C7, which presents the main analysis with and without the pre-Recession controls to see how their inclusion affects the results. Table C21 finds meaningful pre-Recession relationships for the change in attendance rate among all age groups, but these have the opposite sign of our main results. Also, Table C7 shows that, particularly for the statistically significant effect among children age 6-12, the inclusion of the pre-Recession outcome growth has minimal effect on the estimates.

Finally, Table C22 provides analysis similar to the cross-sectional specifications in Table 5 in the main text but using data from 2000 rather than from 2010. It shows that, in some specifications, the negative coefficient on the interaction of the US Employment shock (during the Great Recession) and the household exposure indicator existed even prior to the onset of the Recession. These results reinforce the interpretation that the results in Table 5 of the main paper are primarily suggestive evidence of labor supply responses among affected households and should not be treated as definitive.

Table C17: Placebo test: Sex Ratio, Attainment, and Households Receiving Remittances

	△ Sex Ratio (F/M) 2000-05		△ Less than Primary 2000-05		△ Primary 2000-05		△ Secondary 2000-05		△ University 2000-05		Household Remittances 2000	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
US Employment Shock	-0.562**	-0.651**	0.292*	0.359**	0.197	0.297	-0.239***	-0.277***	-0.273***	-0.337***	0.145	0.135
	(0.252)	(0.271)	(0.152)	(0.182)	(0.147)	(0.181)	(0.070)	(0.081)	(0.068)	(0.072)	(0.098)	(0.113)
New 287g Policy		0.111*		-0.081*		0.108***		0.032		-0.026		-0.066*
		(0.061)		(0.047)		(0.039)		(0.022)		(0.019)		(0.034)
Employment Policy		-0.092**		0.083***		-0.021		-0.041***		-0.017		0.023
		(0.040)		(0.030)		(0.028)		(0.014)		(0.013)		(0.023)
Trade Shock		-0.093***		-0.092***		-0.067		0.070***		0.037		0.022
		(0.034)		(0.033)		(0.048)		(0.024)		(0.025)		(0.025)
Non-tradable share of Employment		-0.042		0.095***		-0.059***		-0.056***		-0.005		0.030**
		(0.027)		(0.019)		(0.021)		(0.011)		(0.009)		(0.013)
Homicide Rate 2005-10		-1.032		4.624		-6.217**		-1.716*		-0.793		-3.451***
		(4.181)		(3.511)		(3.016)		(0.995)		(0.902)		(1.326)
State FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	866	866	866	866	866	866	866	866	866	866	866	866
R-squared	0.241	0.250	0.210	0.248	0.218	0.243	0.205	0.260	0.146	0.154	0.296	0.306

This table examines the effect of changes in US labor demand on the pre-shock change in the female to male sex ratio for the working age population (15-64), the change in the share of the working age population in each education level for each Mexican source municipio, and the share of households receiving remittances as a placebo test. Note that the pre-shock outcome variables are divided by exposure as in equation (7). We measure the sex ratio and educational attainment using the 2000 Mexican Census and the 2005 Conteo. We calculate the share of households receiving remittances as the number of households reporting receiving income from relatives living abroad divided by the municipio's total number of households in the Census year, using the 2000 Mexican Census. All specifications in columns (1) to (12) use a GLS re-weighting procedure to address potential heteroskedasticity and include Mexican state fixed effects. Standard errors clustered at the Mexican Commuting Zone level are shown in parentheses. *** p<0.01, ** p<0.05, * p<0.1

Table C18: Placebo test: Employment-to-population Ratio and Earnings per Hour (All Workers)

	△ EPOP 1999-04		△ ln(Hours) 1999-04		△ ln(Earnings) 1999-04		△ ln(EarnPerHour) 1999-04	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
US Employment Shock	-0.238	-0.338*	-0.719	-1.157	-0.312	-0.385	-0.436	0.072
	(0.177)	(0.183)	(1.653)	(1.896)	(3.365)	(3.875)	(2.729)	(2.889)
New 287g Policy		-0.013		0.348		1.356		0.981
		(0.050)		(0.399)		(0.884)		(0.743)
Employment Policy		-0.043		-0.252		-0.899		-0.557
		(0.035)		(0.267)		(0.694)		(0.557)
Trade Shock		0.102		0.608		1.347*		0.830
		(0.126)		(0.438)		(0.742)		(0.605)
Non-tradable share of Employment		-0.043		0.626**		-1.261**		-2.089***
		(0.046)		(0.286)		(0.624)		(0.498)
Homicide Rate 2005-10		2.172		-54.690***		-101.643*		-57.548
		(2.950)		(21.147)		(56.253)		(45.102)
State FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	865	865	848	848	846	846	846	846
R-squared	0.060	0.065	0.116	0.133	0.088	0.106	0.070	0.111

This table examines the effects of declines in US labor demand on the pre-shock change in the employment-to-population ratio, earnings, hours worked, and earnings per hour in each municipio as a placebo test. We use employment, earnings, and hours from the 1999 and 2004 Mexican Economic Census and population from the 2000 and the 2005 Conteo. Note that the pre-shock outcome variables are divided by exposure as in equation (7). We trim the bottom and top 1 percent of the earnings distribution. All specifications in columns (1) to (8) use a GLS re-weighting procedure to address potential heteroskedasticity and include Mexican state fixed effects. Standard errors clustered at the Mexican Commuting Zone level are shown in parentheses. *** p<0.01, ** p<0.05, * p<0.1

Table C19: Placebo test: Employment-to-population Ratio by Gender

	△ EPOP Women 1999-04		△ EPOP Men 1999-04	
	(1)	(2)	(3)	(4)
US Employment Shock	-0.375**	-0.413***	-0.004	-0.165
	(0.157)	(0.159)	(0.236)	(0.258)
New 287g Policy		-0.027		0.011
		(0.044)		(0.067)
Employment Policy		-0.012		-0.071
		(0.029)		(0.047)
Trade Shock		0.016		0.118
		(0.173)		(0.109)
Non-tradable share of Employment		-0.068*		-0.014
		(0.039)		(0.058)
Homicide Rate 05-10		2.465		2.858
		(2.340)		(4.319)
State FE	Yes	Yes	Yes	Yes
Observations	865	865	865	865
R-squared	0.070	0.079	0.053	0.057

This table examines the effects of declines in US labor demand on the pre-shock change in the employment-to-population ratio for women and men in each municipio as a placebo test. We use employment from the 1999 and 2004 Mexican Economic Census and population from the 2000 and the 2005 Conteo. Note that the pre-shock outcome variables are divided by exposure as in equation (7). We trim the bottom and top 1 percent of the earnings distribution. All specifications in columns (1) to (4) use a GLS re-weighting procedure to address potential heteroskedasticity and include Mexican state fixed effects. Standard errors clustered at the Mexican Commuting Zone level are shown in parentheses. *** p<0.01, ** p<0.05, * p<0.1

Table C20: Placebo test: Appliance Ownership

	△ Computer 2000-05		△ Washing Machine 2000-05		△ Refrigerator 2000-05		△ TV 2000-05	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
US Employment Shock	-0.454***	-0.508***	-0.516*	-0.721**	-1.263***	-1.221***	-0.952***	-1.235***
	(0.157)	(0.168)	(0.270)	(0.329)	(0.312)	(0.388)	(0.241)	(0.309)
New 287g Policy		-0.049		0.230***		0.336***		0.138*
		(0.052)		(0.088)		(0.097)		(0.071)
Employment Policy		-0.005		-0.222***		-0.233***		-0.213***
		(0.030)		(0.067)		(0.079)		(0.049)
Trade Shock		0.048		0.059		0.131**		0.085*
		(0.086)		(0.078)		(0.065)		(0.048)
Non-tradable share of Employment		-0.022		-0.174***		-0.229***		-0.133***
		(0.021)		(0.039)		(0.043)		(0.039)
Homicide Rate 2005-10		0.119		-8.613*		-24.715***		-8.131*
		(2.380)		(4.583)		(9.064)		(4.161)
State FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	866	866	866	866	866	866	866	866
R-squared	0.268	0.272	0.206	0.255	0.305	0.362	0.397	0.425

This table examines the effect of changes in US labor demand on the pre-shock change in ownership of household durables (personal computers, washing machines, refrigerators, and televisions) as a placebo test. We calculate the change in the share households owning the relevant household durable using the 2000 Mexican Census and the 2005 Conteo. All specifications in columns (1) to (8) use a GLS re-weighting procedure to address potential heteroskedasticity and include Mexican state fixed effects. Standard errors clustered at the Mexican Commuting Zone level are shown in parentheses. *** p<0.01, ** p<0.05, * p<0.1

Table C21: Placebo test: School Attendance

	△ Attendance Rate (ages 6-12) 2000-05		△ Attendance Rate (ages 13-15) 2000-05		△ Attendance Rate (ages 16-18) 2000-05	
	(1)	(2)	(3)	(4)	(5)	(6)
US Employment Shock	-0.397***	-0.474***	-0.943***	-0.979***	-0.867***	-0.838***
	(0.097)	(0.110)	(0.262)	(0.268)	(0.256)	(0.291)
New 287g Policy		0.010		-0.098		-0.048
		(0.027)		(0.071)		(0.074)
Employment Policy		-0.035*		-0.007		-0.022
		(0.018)		(0.045)		(0.052)
Trade Shock		0.053***		0.146***		0.187**
		(0.016)		(0.053)		(0.082)
Non-tradable share of Employment		-0.029**		-0.143***		-0.194***
		(0.014)		(0.035)		(0.038)
Homicide Rate 2005-10		0.927		-6.257		-8.459
		(1.962)		(7.104)		(5.313)
State FE	Yes	Yes	Yes	Yes	Yes	Yes
Observations	866	866	866	866	866	866
R-squared	0.236	0.246	0.207	0.235	0.283	0.319

This table examines the effect of changes in US labor demand on the pre-shock change in school attendance as a placebo test. We calculate the change in the share of the population in primary (age 6-12), secondary (13-15), and high-school (16-18) reporting having attended school using the 2000 and the 2005 Conteo. All specifications in columns (1) to (6) use a GLS re-weighting procedure to address potential heteroskedasticity and include Mexican state fixed effects. Standard errors clustered at the Mexican Commuting Zone level are shown in parentheses. *** p<0.01, ** p<0.05, * p<0.1

Table C22: Cross-Sectional Employment Analysis 2000

	State FE	State FE	Municipio FE
	(1)	(2)	(3)
Panel A. All			
US Employment Shock*$\mathbb{1}$(exposed$_h$)	-0.103	-0.000	-0.121*
	(0.163)	(0.096)	(0.063)
$\mathbb{1}$(exposed$_h$)	-0.036**	-0.020**	-0.010**
	(0.016)	(0.009)	(0.005)
Observations	27,969,374	27,969,374	27,969,374
Panel B. Women			
US Employment Shock*$\mathbb{1}$(exposed$_h$)	-0.201	-0.088	-0.293***
	(0.214)	(0.123)	(0.059)
$\mathbb{1}$(exposed$_h$)	-0.044*	-0.024*	-0.011**
	(0.024)	(0.014)	(0.005)
Observations	14,715,945	14,715,945	14,715,945
Panel C. Men			
US Employment Shock*$\mathbb{1}$(exposed$_h$)	0.003	0.098	0.087
	(0.168)	(0.125)	(0.072)
$\mathbb{1}$(exposed$_h$)	-0.028**	-0.014*	-0.006
	(0.014)	(0.008)	(0.007)
Observations	13,253,429	13,253,429	13,253,429

This table examines whether labor supply behavior differs among households with and without unaffected US migrants in municipios facing different US shocks. We use cross-sectional data from the 2000 Census and define households exposed to US labor markets as those with either return migrants or with a household member living in the US. Columns (1) and (2) estimate the specification in Equation (8), including the main effect of the US Employment shock as a control, while column (3) estimates a more general specification with municipio fixed effects and thus omits the US Employment Shock main effect. Column (2) show the results including controls for anti-immigrant employment legislation and new 287(g) agreements across US CZs, trade shocks across municipios (divided by 1,000,000), share of employment in Mexico's non-tradable sector, and changes in homicide rates across municipios (and the municipio fixed effects in column (3) subsume all these controls). The negative coefficients for the interaction term in all columns of Panel A imply that the employment probability is higher in exposed households in municipios connected to larger US employment declines. Panels B and C show that the relationship is driven almost entirely by women. Results are qualitatively similar to those in columns (1) and (2), though a bit less precise, when controlling for state × exposure status fixed effects. Standard errors clustered at the Mexican Commuting Zone level are shown in parentheses. *** p<0.01, ** p<0.05, * p<0.1

C.8 Sample restriction

Tables C23 – C28 show results paralleling those in the main text but only limiting the sample to municipios whose citizens received at least 100 MCAS cards in 2006. For most outcomes, the point estimates are similar in magnitude and statistical significance to those in the main text, which further restrict the sample to municipios that had at least 5,000 residents in the year 2005 and had exposure $\xi_s > 0.066$ (the 25th percentile). Notable exceptions are television ownership and primary school enrollment.

Table C23: Population Growth, Return Migration, and Emigration

	Population Growth 2005-10			Return Migration 2005-10			Emigration 2005-10		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
US Employment Shock	-1.684***	-0.684*	-0.330	-0.157**	-0.252***	-0.173**	0.222**	0.223**	0.259***
	(0.424)	(0.384)	(0.393)	(0.069)	(0.064)	(0.069)	(0.092)	(0.091)	(0.094)
Pre-shock Outcome		0.555***	0.544***		1.433***	1.414***		0.153***	0.144***
		(0.051)	(0.050)		(0.328)	(0.328)		(0.035)	(0.035)
New 287g Policy			0.243**			0.076***			0.015
			(0.107)			(0.016)			(0.021)
Employment Policy			0.005			-0.011			-0.005
			(0.064)			(0.011)			(0.015)
Trade Shock			-0.070			0.031***			0.041***
			(0.083)			(0.011)			(0.009)
Non-tradable share of Employment			-0.116**			-0.019***			0.005
			(0.051)			(0.007)			(0.010)
Homicide Rate 2005-10			-18.044*			-4.703***			-7.880***
			(10.022)			(0.926)			(2.422)
State FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	1,194	1,194	1,194	1,194	1,194	1,194	1,192	1,192	1,192
R-squared	0.159	0.441	0.454	0.290	0.560	0.577	0.270	0.320	0.339

This table examines the effect of changes in US labor demand on the 2005-10 population growth, return migration to, and emigration from each Mexican source municipio with more than 100 MCAS card issued. Note that outcome and pre-shock outcome variables are divided by exposure as in equation (7). We restrict attention to individuals age 15-64. Population growth is defined as the proportional change in population. Return migration is the number of individuals reporting living in the US 5 years prior to the relevant survey, divided by the municipio population in the survey year, while emigration is the number of household members who left for the US during the 5 years prior to the relevant survey, divided by the initial municipio population, measured using the roughly 10% long-form sample from the 2000 or 2010 Census (emigration information is not available in 2005). We use full-count tabulations from the 2000 or 2010 Mexican Census or 2005 Conteo to calculate population growth and return migration. All specifications in columns (1) to (9) use a GLS re-weighting procedure to address potential heteroskedasticity. The "Pre-shock Outcome" controls in columns (2), (5), and (8) are 2000-2005 population growth, 2000-2005 return migration, and 1995-2000 emigration, respectively. Columns (3), (6), and (9) additionally control for anti-immigrant employment legislation and new 287(g) agreements across US CZs, trade shocks across municipios (divided by 1,000,000), share of employment in Mexico's non-tradable sector, and changes in homicide rates across municipios. All specifications control for Mexican state fixed effects, and standard errors clustered at the Mexican commuting zone level are shown in parentheses. *** p<0.01, ** p<0.05, * p<0.1

Table C24: Sex Ratio, Attainment, and Households Receiving Remittances

	△ Sex Ratio (F/M) 2005-10			△ Less than Primary 2005-10			△ Primary 2005-10			△ Secondary 2005-10			△ University 2005-10			Household Remittances 2010		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)
US Employment Shock	0.632***	0.530***	0.474**	0.157	-0.036	-0.100	0.060	0.107	0.114	-0.107**	-0.052	-0.055	-0.038	0.084**	0.094**	0.555***	0.462***	0.495***
	(0.215)	(0.197)	(0.213)	(0.098)	(0.092)	(0.101)	(0.115)	(0.121)	(0.131)	(0.052)	(0.059)	(0.064)	(0.042)	(0.039)	(0.044)	(0.110)	(0.096)	(0.107)
Pre-shock Outcome		-0.288***	-0.287***		0.513***	0.506***		0.595***	0.614***		0.708***	0.701***		0.742***	0.731***		0.542***	0.536***
		(0.035)	(0.035)		(0.022)	(0.023)		(0.079)	(0.077)		(0.064)	(0.064)		(0.056)	(0.056)		(0.043)	(0.044)
New 287g Policy			-0.051			-0.071***			0.082***			-0.001			-0.005			0.003
			(0.044)			(0.022)			(0.029)			(0.015)			(0.012)			(0.026)
Employment Policy			0.014			0.009			-0.013			-0.005			0.001			0.005
			(0.032)			(0.016)			(0.021)			(0.010)			(0.008)			(0.017)
Trade Shock			-0.083***			-0.035**			0.314***			-0.207***			-0.021			0.038*
			(0.025)			(0.014)			(0.038)			(0.031)			(0.025)			(0.022)
Non-tradable share of Employment			-0.005			0.012			0.057***			-0.022***			-0.027***			0.019
			(0.020)			(0.011)			(0.017)			(0.008)			(0.006)			(0.012)
Homicide Rate 2005-10			9.665**			2.995**			2.916			0.921			-0.881			-6.199**
			(3.817)			(1.515)			(1.780)			(1.006)			(0.864)			(2.983)
State FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	1,194	1,194	1,194	1,194	1,194	1,194	1,194	1,194	1,194	1,194	1,194	1,194	1,194	1,194	1,194	1,194	1,194	1,194
R-squared	0.158	0.281	0.289	0.202	0.727	0.730	0.263	0.461	0.498	0.277	0.543	0.560	0.187	0.604	0.606	0.146	0.397	0.403

This table examines the effect of changes in US labor demand on the 2005-10 change in the female to male sex ratio for the working age population (15-64), the 2005-10 change in the share of the working age population in each education level for each Mexican source municipio, and the share of households receiving remittances in 2010. Note that outcome and pre-shock outcome variables are divided by exposure as in equation (7). We measure the sex ratio and educational attainment using the 2000 or 2010 Mexican Census or 2005 Inter-Censal Count. We calculate the share of households receiving remittances as the number of households reporting receiving income from relatives living abroad divided by the municipio's total number of households in the Census year, using the 2000 or 2010 Mexican Census. All specifications in columns (1) to (18) use a GLS re-weighting procedure to address potential heteroskedasticity. All specifications include Mexican state fixed effects. Standard errors clustered at the Mexican Commuting Zone level are shown in parentheses. *** p<0.01, ** p<0.05, * p<0.1

Table C25: Employment-to-population Ratio and Earnings per Hour (All Workers)

	△ EPOP 2004-09			△ ln(Hours) 2004-09			△ ln(Earnings) 2004-09			△ ln(EarnPerHour) 2004-09		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
US Employment Shock	-0.047	-0.145	-0.125	-0.875	-1.103	-0.982	-1.294	-1.189	-1.644	-0.307	-0.265	-0.795
	(0.133)	(0.140)	(0.146)	(1.114)	(1.119)	(1.287)	(2.426)	(2.433)	(2.649)	(2.036)	(1.974)	(2.216)
△ EPOP 1999-04		-0.469***	-0.453***									
		(0.127)	(0.130)									
△ ln(Hours) 1999-04					-0.060	-0.090		0.414***	0.416***		0.538***	0.531***
					(0.066)	(0.065)		(0.136)	(0.138)		(0.072)	(0.073)
△ ln(Earnings) 1999-04					0.058***	0.064***		-0.138***	-0.131***		-0.189***	-0.187***
					(0.020)	(0.020)		(0.049)	(0.049)		(0.033)	(0.033)
New 287g Policy			-0.016			0.140			1.132			1.076*
			(0.046)			(0.412)			(0.774)			(0.577)
Employment Policy			0.020			0.003			-0.792			-0.816**
			(0.027)			(0.168)			(0.491)			(0.379)
Trade Shock			-0.453***			-0.774**			-0.205			0.450
			(0.075)			(0.372)			(0.762)			(0.518)
Non-tradable share of Employment			0.017			0.554***			1.063**			0.498
			(0.029)			(0.200)			(0.448)			(0.333)
Homicide Rate 05-10			-1.331			-20.628			-34.998			-6.853
			(2.712)			(19.554)			(41.732)			(30.580)
State FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	1,194	1,194	1,194	1,163	1,160	1,160	1,163	1,160	1,160	1,163	1,160	1,160
R-squared	0.046	0.214	0.220	0.194	0.134	0.145	0.102	0.140	0.154	0.077	0.203	0.210

This table examines the effects of declines in US labor demand on the 2004-2009 change in the employment-to-population ratio, earnings, hours worked, and earnings per hour in each municipio, using employment, earnings, and hours from the 1999, 2004 and 2009 Mexican Economic Census and population from the 2000 and 2010 Mexican Census and the 2005 Conteo. Note that the outcome and pre-shock outcome variables are divided by exposure as in equation (7). We trim the bottom and top 1 percent of the earnings distribution. All specifications in columns (1) to (12) use a GLS re-weighting procedure to address potential heteroskedasticity. All specifications include Mexican state fixed effects. Standard errors clustered at the Mexican Commuting Zone level are shown in parentheses. *** p<0.01, ** p<0.05, * p<0.1

Table C26: Employment-to-population Ratio by Gender

	△ EPOP Women 2004-09			△ EPOP Men 2004-09		
	(1)	(2)	(3)	(4)	(5)	(6)
US Employment Shock	0.046	-0.163	-0.281*	-0.068	-0.097	0.023
	(0.093)	(0.139)	(0.145)	(0.181)	(0.173)	(0.191)
△ EPOP		-0.496***	-0.492***		-0.384***	-0.390***
1999-04		(0.154)	(0.157)		(0.099)	(0.098)
New 287g Policy			-0.102***			0.061
			(0.039)			(0.075)
Employment Policy			-0.017			0.051
			(0.025)			(0.038)
Trade Shock			-0.161			-0.819***
			(0.123)			(0.078)
Non-tradable share			0.023			0.034
of Employment			(0.037)			(0.036
Homicide Rate 05-10			0.521			-1.435
			(2.267)			(3.641)
State FE	Yes	Yes	Yes	Yes	Yes	Yes
Observations	1,194	1,193	1,193	1,194	1,193	1,193
R-squared	0.097	0.259	0.269	0.045	0.177	0.234

This table examines the effects of declines in US labor demand on the 2004-2009 change in the employment-to-population ratio for women and men in each municipio, using employment from the 1999, 2004 and 2009 Mexican Economic Census and population from the 2000 and 2010 Mexican Census and the 2005 Conteo. Note that the outcome and pre-shock outcome variables are divided by exposure as in equation (7). We trim the bottom and top 1 percent of the earnings distribution. All specifications in columns (1) to (6) use a GLS re-weighting procedure to address potential heteroskedasticity. All specifications include Mexican state fixed effects. Standard errors clustered at the Mexican Commuting Zone level are shown in parentheses. *** p<0.01, ** p<0.05, * p<0.1

Table C27: Appliance Ownership

	△ Computer 2005-10			△ Washing Machine 2005-10			△ Refrigerator 2005-10			△ TV 2005-10		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
US Employment Shock	-0.016	0.075	0.045	0.238	0.347*	0.245	-0.075	0.104	0.017	0.010	0.203	0.127
	(0.105)	(0.074)	(0.079)	(0.190)	(0.179)	(0.200)	(0.197)	(0.176)	(0.187)	(0.182)	(0.212)	(0.236)
△ in Outcome 2005-00		0.833***	0.830***		0.262***	0.254***		0.292***	0.285***		0.315***	0.316***
		(0.032)	(0.031)		(0.020)	(0.020)		(0.026)	(0.027)		(0.026)	(0.027)
New 287g Policy			-0.035			0.067			0.067			-0.007
			(0.025)			(0.047)			(0.044)			(0.040)
Employment Policy			-0.007			-0.093***			-0.075**			-0.024
			(0.016)			(0.032)			(0.030)			(0.029)
Trade Shock			-0.093**			0.048			0.097*			0.074
			(0.038)			(0.064)			(0.056)			(0.048)
Non-tradable share of Employment			-0.080**			0.037			0.094*			0.061
			(0.061)			(0.053)			(0.041)			
Homicide Rate 05-10 of Employment			0.569			-1.248			1.577			6.036**
			(1.352)			(2.734)			(2.774)			(2.879)
State FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	1,194	1,194	1,194	1,194	1,194	1,194	1,194	1,194	1,194	1,194	1,194	1,194
R-squared	0.262	0.856	0.857	0.414	0.540	0.544	0.342	0.517	0.521	0.189	0.376	0.379

This table examines the effect of changes in US labor demand on the 2005-10 change in ownership of household durables (personal computers, washing machines, refrigerators, and televisions). We calculate the change in the share households owning the relevant household durable using the 2000 or 2010 Mexican Census or 2005 Conteo. All specifications in columns (1) to (12) use a GLS re-weighting procedure to address potential heteroskedasticity. All specifications include Mexican state fixed effects. Standard errors clustered at the Mexican Commuting Zone level are shown in parentheses. *** p<0.01, ** p<0.05, * p<0.1

Table C28: School Attendance

	△ Attendance Rate (ages 6-12) 2005-10			△ Attendance Rate (ages 13-15) 2005-10			△ Attendance Rate (ages 16-18) 2005-10		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
US Employment Shock	-0.015	-0.020	-0.021	-0.258	-0.232	-0.120	-0.391**	-0.286	-0.252
	(0.059)	(0.059)	(0.067)	(0.160)	(0.165)	(0.180)	(0.195)	(0.200)	(0.219)
△ in Outcome		-0.023	-0.024		0.110***	0.099***		0.142***	0.128***
2005-00		(0.022)	(0.023)		(0.028)	(0.028		(0.033)	(0.034)
New 287g Policy			0.001			0.060			0.040
			(0.016)			(0.048)			(0.053)
Employment Policy			-0.004			0.006			-0.030
			(0.012)			(0.035)			(0.035)
Trade Shock			0.035***			0.103***			-0.009
			(0.012)			(0.025)			(0.044)
Non-tradable share			0.000			-0.026			-0.079***
of Employment			(0.009)			(0.022)			(0.028)
Homicide Rate 05-10			-1.779*			-9.337**			-4.059
			(0.947)			(3.880)			(4.776)
State FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	1,194	1,194	1,194	1,194	1,194	1,194	1,194	1,194	1,194
R-squared	0.057	0.058	0.063	0.187	0.203	0.213	0.191	0.219	0.226

This table examines the effect of changes in US labor demand on the 2005-10 change in school attendance. We calculate the change in the share of the population in primary (age 6-12), secondary (13-15), and high-school (16-18) reporting having attended school using the 2000 or 2010 Mexican Census or 2005 Conteo. All specifications in columns (1) to (9) use a GLS re-weighting procedure to address potential heteroskedasticity. All specifications include Mexican state fixed effects. Standard errors clustered at the Mexican Commuting Zone level are shown in parentheses. *** p<0.01, ** p<0.05, * p<0.1

C.9 Comparison of Return Migrants to Local Population

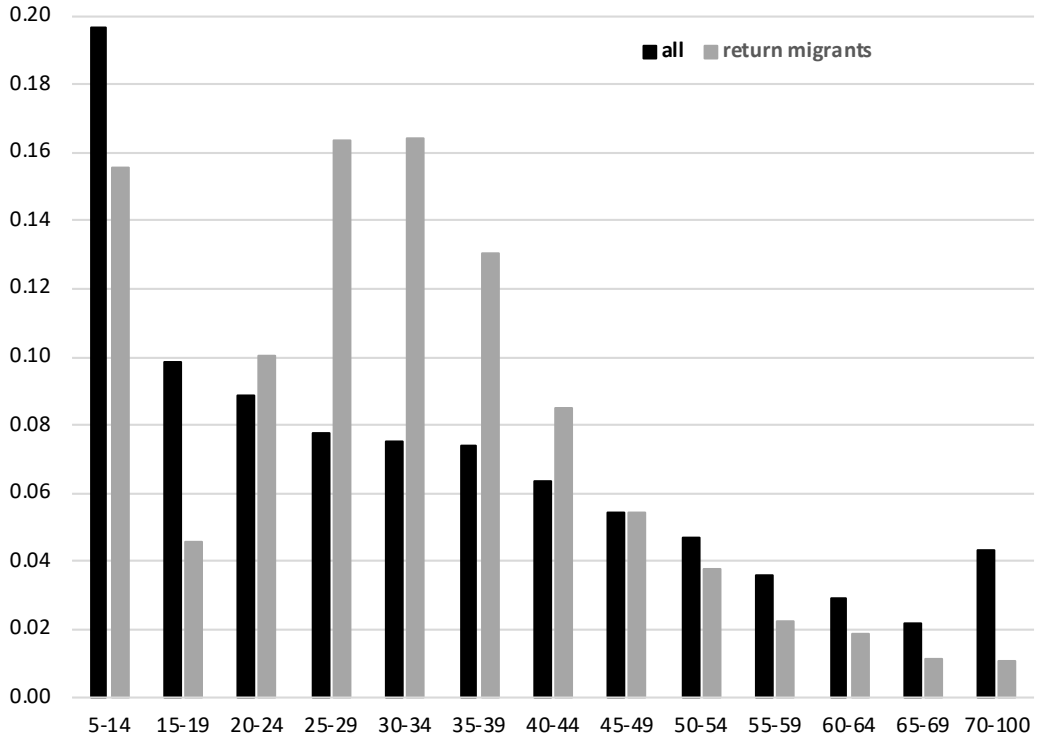
Table C29 and Figure C2 use 2010 Mexican Census data to compare return migrants to non-migrants.

Table C29: Descriptive Statistics, 2010 Census

Characteristics	All	Return Migrants 2005-2010
Female	51.3%	31.3%
Married	42.0%	57.9%
Education		
Less than primary	35.5%	25.8%
Primary	42.8%	54.5%
Secondary	14.5%	15.5%
University	7.2%	4.2%
Employment		
Employed	50.1%	62.9 %
Self-employed	27.7%	31.6%
Paid employee	69.1%	63.6%
Unpaid worker	3.2%	4.7%
Unemployed	2.4%	5.5%
Not in the labor force	47.5%	31.6%
Hourly wage (yr 2000 pesos)	19.64	18.90

Authors' calculations using data from the 2010 Mexican Census. Return migrants are defined as those living in the US in June 2005, five years prior to the Census. Hourly wages calculated as (monthly earnings / 4.33) / (weekly hours) and deflated to year 2000 pesos using the consumer price index (INPC) from INEGI. Average hourly wages omit the top and bottom 1 percent of observations. Note that, in comparison to the overall population, return migrants are disproportionately male, more likely to be married, more likely to have primary school education, and more likely to be in the labor force.

Figure C2: 2005-2010 Return Migrants' Age Distribution



Authors' calculations using data from the 2010 Mexican Census. Return migrants are defined as those living in the US in June 2005, five years prior to the Census. Note that, in comparison to the overall population, return migrants are much more likely to be in the 25-39 age range and less likely to be under 20 and over 60.

C.10 Population Growth Decomposition

Table C30 provides a complete decomposition of the components of population growth, as examined in Table 1. In addition to return migration and emigration, this table considers net migration internal to Mexico, aging in and out of the working age population, and a residual component left over after removing all of these measured components. Columns (1), (4), and (7) exactly replicate the results in the respective columns in Table 1, and columns (10), (13), and (16) provide similar analysis for the additional components without any additional controls. The second column in each set of results controls for lagged changes in all of the dependent variables. Note that these specifications differ slightly from the second specifications shown in Table 1 because they control for multiple lagged changes rather than only the change in the dependent variable of a given regression. The final column in each set adds the further set of controls included in columns (3), (6), and (9) of Table 1.

The results reveal no statistically significant relationship between the US Employment shock and either net internal migration or population aging, which suggests that these components are not coincidentally related to the employment shock. Somewhat puzzlingly, the US Employment Shock is related to the residual portion of population growth. One possible explanation for this unexplained component is mismeasurement in migration. If, for example, some return migrants are coded as not having been in the US, perhaps due to concerns about having emigrated without legal authorization, it could lead to this pattern of results. Alternatively, whole-household emigrants are not captured by our emigration measure, so these emigrants may appear in the residual. Because we cannot say definitively what the source of the residual population growth is, we consider a range of values from 1 to 2 percentage points for the magnitude of the population growth implied by this analysis. The low end of the range reflects the implied change in population due to measured differences in net international migration, while the high end reflects the entire estimated change in population, including the residual component.

Table C30: Population Growth Decomposition

	Population Growth 2005-10			Return Migration 2005-10			Emigration 2005-10			Net Internal Migration 2005-10			Population aging in and out 2005-10			Residual 2005-10		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)
US Employment Shock	-2.070*** (0.573)	-1.345*** (0.441)	-1.098** (0.440)	-0.201*** (0.072)	-0.210*** (0.059)	-0.145** (0.063)	0.210* (0.117)	0.238** (0.111)	0.301*** (0.113)	-0.477* (0.274)	0.022 (0.217)	0.122 (0.254)	-0.512 (0.338)	0.011 (0.085)	0.004 (0.097)	-0.505 (0.442)	-0.984*** (0.376)	-0.949** (0.416)
Population Growth 2000-05		0.363** (0.142)	0.356** (0.142)		-0.008* (0.004)	-0.007* (0.004)		-0.025*** (0.005)	-0.024*** (0.005)		0.206** (0.092)	0.212** (0.092)		0.004 (0.008)	0.004 (0.008)		0.222*** (0.077)	0.219*** (0.077)
Return Migration Rate 2000-05		-3.442*** (0.292)	-3.587*** (0.292)		1.072*** (0.407)	1.056*** (0.394)		1.173*** (0.604)	1.142*** (0.600)		-0.811 (0.426)	-1.028* (0.423)		0.444 (0.689)	0.442 (0.694)		-2.870***	-2.854***
Emigration Rate 1995-00		0.560*** (0.134)	0.489*** (0.130)		0.170*** (0.034)	0.162*** (0.034)		0.068** (0.034)	0.058* (0.033)		0.360*** (0.085)	0.295*** (0.086)		-0.068** (0.034)	-0.072** (0.034)		0.276** (0.130)	0.275** (0.132)
Net Migration Rate 2000-05		0.039 (0.026)	0.042 (0.026)		0.010* (0.005)	0.011* (0.006)		0.003 (0.002)	0.003 (0.003)		0.914*** (0.108)	0.920*** (0.107)		0.004 (0.003)	0.004 (0.003)		-0.859*** (0.142)	-0.864*** (0.139)
Population aging in and out 2000-05		0.562*** (0.088)	0.548*** (0.091)		0.020*** (0.005)	0.016*** (0.005)		0.052*** (0.008)	0.051*** (0.008)		-0.041 (0.061)	-0.059 (0.061)		0.924*** (0.012)	0.924*** (0.012)		-0.358*** (0.064)	-0.355*** (0.066)
New 287g Policy			0.098 (0.108)			0.063*** (0.016)			0.001 (0.025)			0.149* (0.077)			0.000 (0.020)			-0.144 (0.111)
Employment Policy			0.027 (0.011)			-0.004 (0.018)			0.014 (0.044)			-0.008 (0.015)			-0.005 (0.083)			0.059
Trade Shock			-0.002 (0.010)			0.026*** (0.015)			0.038** (0.077)			0.224*** (0.012)			-0.024** (0.089)			-0.260***
Non-tradable share of Employment			-0.047 (0.051)			-0.012* (0.007)			0.019* (0.011)			0.012 (0.037)			-0.000 (0.012)			-0.045 (0.053)
Homicide Rate 2005-10			-20.781** (9.274)			-3.493*** (0.829)			-6.451*** (1.599)			-13.749*** (4.153)			-1.232 (1.104)			-1.874 (8.880)
State FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	866	866	866	866	866	866	866	866	866	866	866	866	866	866	866	866	866	866
R-squared	0.163	0.588	0.595	0.332	0.599	0.617	0.271	0.394	0.411	0.104	0.706	0.714	0.224	0.978	0.978	0.088	0.602	0.608

This table examines the effect of changes in US labor demand on the 2005-10 population growth and its components, including: return migration to, and emigration from each Mexican source municipio, internal net migration, and population aging in and out of the working age population. Note that outcome and pre-shock outcome variables are divided by exposure as in equation (7). We restrict attention to individuals age 15-64. Population growth is defined as the proportional change in population. Return migration is the number of individuals reporting living in the US 5 years prior to the relevant survey, divided by the municipio population in the survey year, while emigration is the number of household members who left for the US during the 5 years prior to the relevant survey, divided by the initial municipio population, measured using the roughly 10% long-form sample from the 2000 or 2010 Census (emigration information is not available in 2005). Internal net migration at the municipio level is calculated as the difference between each municipio's immigrants and emigrants during the 5 years prior to the to the relevant survey, divided by the initial municipio population, measured using the roughly 10% long-form sample from the 2000 or 2010 Census (internal migration information is not available in 2005). We use full-count tabulations from the 2000 or 2010 Mexican Census or 2005 Conteo to calculate population growth, return migration, and population aging in and out. All specifications use a GLS re-weighting procedure to address potential heteroskedasticity. The "Pre-shock Outcome" controls in columns (2), (5), (8), (11), (14) are 2000-2005 population growth, 2000-2005 return migration, 1995-2000 emigration, 1995-2000 net migration, and 2000-2005 population aging in and out, respectively. All specifications control for Mexican state fixed effects, and standard errors clustered at the Mexican commuting zone level are shown in parentheses. Standard errors clustered at the Mexican Commuting Zone level are shown in parentheses. *** p<0.01, ** p<0.05, * p<0.1

C.11 Long-term changes in employment to population ratio

Table C31 provides additional analysis extending the follow-up window of the results in Table 4 into later periods following the onset of the Great Recession. The first column replicates the results shown in column (1) of Table 4. The second and third columns use the same regression specification but with differences in the dependent variable calculated through 2014 and 2019, respectively. The results in Panel B suggest that the increase in female labor supply due the loss of network-connected jobs lasted at least through 2019. For men (Panel C), there is no indication of a short-run or long-run change in employment rate.

Table C31: Employment-to-population Ratio: Extended Time Periods

	△ EPOP 2004-09	△ EPOP 2004-14	△ EPOP 2004-19
	(1)	(2)	(3)
Panel A. All			
US Employment Shock	-0.366**	-0.196	-0.712**
	[0.160]	[0.244]	[0.263]
	(0.186)	(0.269)	(0.362)
△ EPOP 1999-04	-0.511***	-0.490***	-0.294**
	(0.116)	(0.138)	(0.140)
Mean raw outcome among less affected	0.013	0.021	0.040
Implied shock impact	0.007	0.004	0.013
Panel B. Women			
US Employment Shock	-0.563***	-0.519**	-1.131***
	[0.137]	[0.216]	[0.239]
	(0.177)	(0.233)	(0.291)
△ EPOP Women 1999-04	-0.577***	-0.577***	-0.429**
	(0.159)	(0.156)	(0.168)
Mean raw outcome among less affected	0.015	0.025	0.042
Implied shock impact	0.011	0.010	0.021
Panel C. Men			
US Employment Shock	-0.112	0.239	-0.275
	[0.250]	[0.391]	[0.354]
	(0.236)	(0.377)	(0.475)
△ EPOP Men 1999-04	-0.408***	-0.377***	-0.167
	(0.087)	(0.111)	(0.136)
Mean raw outcome among less affected	0.009	0.015	0.036
Implied shock impact	0.002	-0.004	0.005
State FE	Yes	Yes	Yes
Observations	865	865	865

This table examines the effects of declines in US labor demand on the change in the employment-to-population ratio in each municipio, using employment from the 1999, 2004, 2014, and 2019 Mexican Economic Census and population from the 2000, 2010, and 2020 Mexican Census and the 2005 Conteo to examine changes across different time horizons. Note that the outcome and pre-shock outcome variables are divided by exposure, ξ_s, as in equation (7). All specifications in columns (1) to (3) use a GLS re-weighting procedure to address potential heteroskedasticity. All specifications include controls for anti-immigrant employment legislation and new 287(g) agreements across US CZs, trade shocks across municipios (divided by 1,000,000), the share of employment in Mexico's non-tradable sector, changes in homicide rates across municipios, and Mexican state fixed effects. "Mean raw outcome among less affected" is the average of the dependent variable without dividing by exposure for municipios in the quartile with the smallest magnitude US employment shocks. "Implied shock impact" provides the predicted difference in the outcome (without dividing by exposure) for municipios with the 90-10 percentile difference in shock size (0.075) and average exposure (0.25). Standard errors clustered at the Mexican Commuting Zone level are shown in parentheses. Due to the shift-share structure of the US Employment Shock, we also present Borusyak et al. (2022) standard errors for this variable in square brackets. *** p<0.01, ** p<0.05, * p<0.1 based on standard errors in brackets when present.